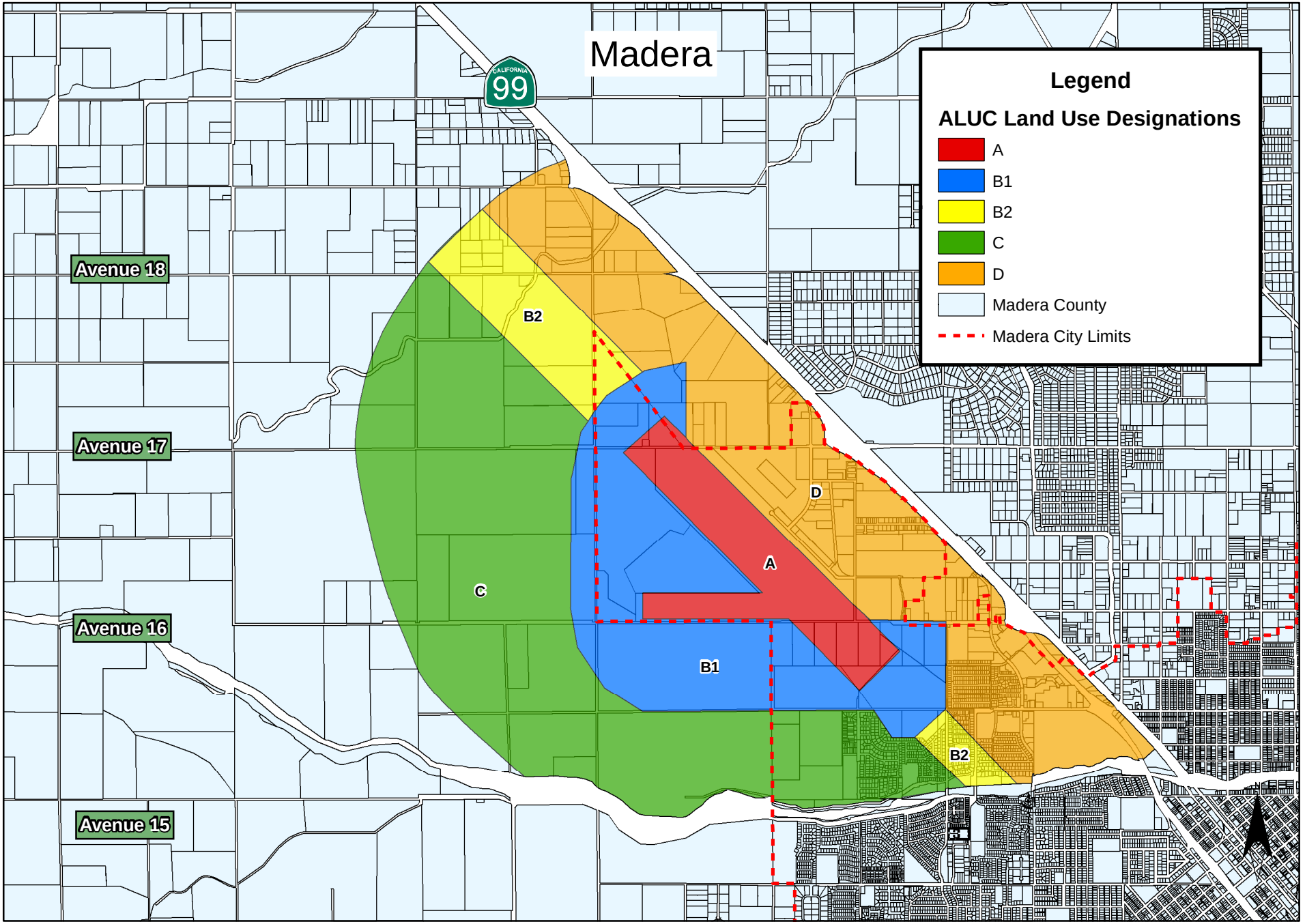
Airport Land Use Commission
Land Use Designations



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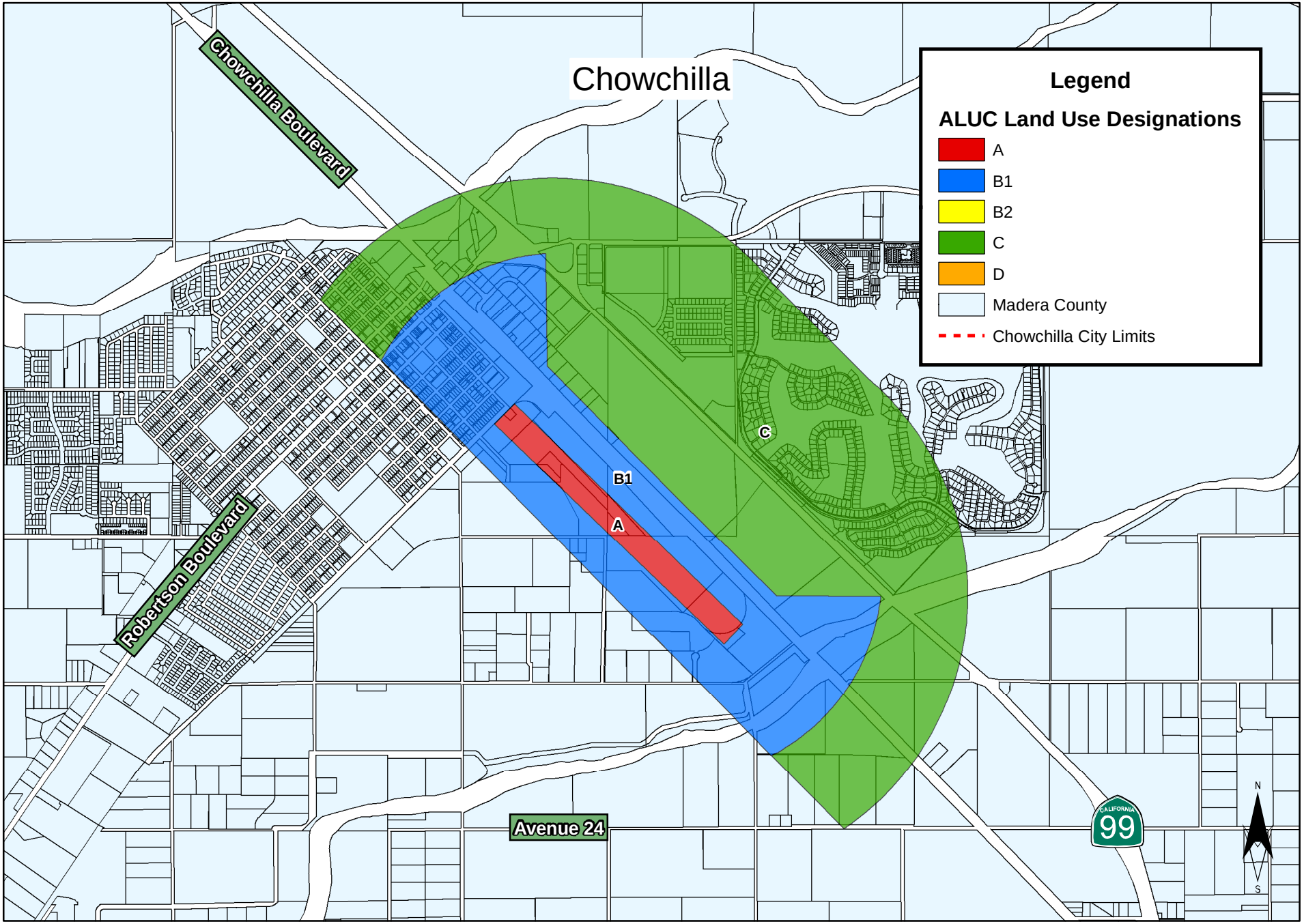

Airport Land Use Compatibility Plan

Madera County Airports

Madera County
Airport Land Use Commission

Adopted
December 16, 1993

Airport Land Use Compatibility Plan

Madera County Airports

Prepared
for
Madera County
Airport Land Use Commission

by
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Santa Rosa, California

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Introduction

FUNCTION AND AUTHORITY

The basic purpose of airport land use commissions is to help ensure that proposed development in the vicinity of airports will be compatible with airport activities.

This *Airport Land Use Compatibility Plan* sets forth the criteria and policies which the Madera County Airport Land Use Commission will use in assessing the compatibility between the principal airports in Madera County and proposed land use development in the areas surrounding them. The emphasis of the Plan is on review of local general and specific plans, zoning ordinances, and other land use documents covering broad geographic areas. Certain individual land use development proposals also may be reviewed by the Commission as provided for in the policies enumerated in the next chapter. The Commission does not have authority over existing incompatible land uses or the operation of any airport.

The Plan specifically pertains to the land uses surrounding the following airports:

- Chowchilla Municipal Airport.
- Madera Municipal Airport.

Additionally, the Plan provides guidance for Commission review of new airports and heliports proposed for construction in the County.

State Statutes

The statutory authority for establishment of airport land use commissions and the adoption of airport land use compatibility plans is provided in the California Public Utilities Code, Sections 21670 et seq. (Chapter 4, Article 3.5 of the State Aeronautics Act). Int he past, every county in which a public-use airport is located was required to establish an airport land use commission. However, in July 1993, the law was changed to make their creation optional.

The commissions' charge is expressly stated as being:

> *... to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses.*

As a means of fulfilling this responsibility, each commission is required to formulate a comprehensive land use plan for the areas surrounding the airports within its jurisdiction. The plan must reflect the anticipated growth of the airports during at least the next 20 years. Limitations on building heights, restrictions on the use of land, and standards for building construction can be specified in the plan.

The state legislation establishing airport land use commissions was originally enacted in 1967. Since that time, several major revisions and numerous minor ones have been adopted. Appendix A of this document contains the complete text of the state law as of July 1993.

MADERA COUNTY AIRPORT LAND USE COMMISSION

The Madera County Airport Land Use Commission was formed by the Board of Supervisors (Resolution No. 91-159) on May 14, 1991. The Commission's first meeting was held on July 23, 1991. The Commission is organized in the basic manner provided by state law — two county representatives, two representatives of the cities in the County (Chowchilla and Madera), two representatives of the airport managers, and one general public representative. Staff for the Commission is provided by the Madera County Planning Department.

The Commission adopted this *Airport Land Use Compatibility Plan* on December 16, 1993.

RELATIONSHIP TO LOCAL JURISDICTIONS AND PLANS

The fundamental relationships between the Madera County Airport Land Use Commission and local jurisdictions, as well as between the *Airport Land Use Compatibility Plan* and local land use plans, is set by state law. Although the Commission functions under the general auspices of Madera County government, it is not controlled by the county. In this regard, the Airport Land Use Commission is more equivalent to the Madera County Local Agency Formation Commission (LAFCO) than to the County Planning Commission. Within the bounds provided by state law, the decisions of the Commission — including the adoption of this plan — are final. Other than through its larger representation on the Commission, the County does not have any greater legal authority over the Commission than do the individual cities in the county.

The major power which the local governments hold over the Airport Land Use Commission is the ability to override certain of the Commission's decisions. If the Commission rules that a local plan or land use action is inconsistent with the Commission's plan, state law allows the local agency to overrule the Commission by a two-thirds vote of its governing body. Before doing so, the local

agency must hold a public hearing on the matter and must make specific findings that the proposed action is consistent with the purposes of the state law. However, if a public agency overrides an Airport Land Use Commission decision regarding an airport not operated by that agency, state law (Section 21678) provides that the airport operator "... shall be immune from liability for damages to property or personal injury caused by or resulting directly or indirectly from the public agency's decision to override the commission's action or recommendation."

USING THIS DOCUMENT

This *Airport Land Use Compatibility Plan* document is divided into three parts:

- Part I – Policies;
- Part II – Supporting Information; and
- Part III – Appendices.

Policies

The compatibility criteria, compatibility maps, and review process policies set forth in Part I (Chapters 2 and 3) are the core of the document. The most vital pieces of these chapters are the Compatibility Criteria table in Chapter 2 and the Compatibility Map for each airport in Chapter 3. The table and maps provide a single, combined set of zones and associated criteria covering each of the basic types of airport impacts – noise, safety, airspace, and overflight. This combined approach is intended as a means of facilitating projected review. It is anticipated that the compatibility of the majority of land use proposals can be evaluated with reference to these elements alone. More detailed supporting criteria policies and policies applicable to individual airports are provided as clarification and to aid in review of proposals that are not clearly compatible or incompatible.

An important point to note about this plan is that the criteria are performance oriented rather than list oriented. That is, the criteria contain standards to be achieved (e.g., occupancy limits), rather than a list of specific uses which are permitted in each zone. This format directly relates a concern (e.g., safety) to a criterion (e.g., occupancy limits).

State law requires that local entities, including the county, submit copies of their general and specific plans, and future amendments, to the Commission for review as to consistency with the Commission's plan. When the local jurisdictions modify their individual land use plans to be consistent with this *Airport Land Use Compatibility Plan*, they have the option of developing a detailed land use list by applying the performance criteria to the individual land use designations included in their locals plans and zoning ordinances.

Additional Contents

Part II of the document contains background information used in development of the policies. Chapter 4 supplies essential data regarding each of the airports and their environs. Chapter 5 discusses some of the strategies which local jurisdictions can use to implement the *Airport Land Use Compatibility Plan* criteria and policies.

The final part of the document, Part III, includes the text of essential state and federal laws and regulations, plus various materials useful in implementation of the Plan.

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Policies

1. SCOPE OF REVIEW

1.1. Geographic Area of Concern

The Madera County Airport Land Use Commission's planning area encompasses:

1.1.1. *Airport Vicinity* — All lands on which the uses could be negatively affected by present or future aircraft operations at the following airports in the County and lands on which the uses could negatively affect said airports. The specific limits of the planning area for each airport are depicted on the respective *Compatibility Map* for that airport as presented in Chapter 3.

(a) Chowchilla Municipal Airport.

(b) Madera Municipal.

1.1.2. *Countywide Impacts on Flight Safety* — Those lands, regardless of their location in the County, on which the uses could adversely affect the safety of flight in the County. The specific uses of concern are identified in Paragraph 1.2.

1.1.3. *New Airports and Heliports* — The site and environs of any proposed new airport or heliport anywhere in the County.

1.2. Types of Airport Impacts

The Commission is concerned only with the potential impacts related to aircraft noise, land use safety (with respect both to people on the ground and the occupants of aircraft), airspace protection, and aircraft overflights. Other impacts sometimes created by airports (e.g., air pollution, automobile traffic, etc.) are beyond the scope of this plan. These impacts are within the authority of other local, state, and federal agencies

and are addressed within the environmental review procedures for airport development.

1.3. Types of Actions Reviewed

1.3.1. *General Plan Consistency Review* — Within 180 days of adoption of the *Airport Land Use Compatibility Plan*, the Commission shall review the general plans and specific plans of affected local jurisdictions to determine their consistency with the Commission's policies. At the time the Commission reviews the general and specific plans of the local agencies, the local agency should submit a map which identifies those areas it believes meets the definition of "infill" contained in Policy 2.1.5. The Commission will include a determination on the infill as part of its action on the consistency of the general and specific plans. Until such time as (1) the Commission finds that the local general plan or specific plan is consistent with the *Airport Land Use Compatibility Plan*, or (2) the local agency has overruled the Commission's determination of inconsistency, the local jurisdiction shall refer all actions, regulations, and permits (as specified in Paragraph 1.3.3) involving the airport area of influence to the Commission for review (Section 21676.5 (a)).

1.3.2. *Statutory Requirements* — As required by state law, the following types of actions shall be referred to the Airport Land Use Commission for determination of consistency with the Commission's plan *prior to their approval* by the local jurisdiction:

(a) The adoption or approval of any amendment to a general or specific plan affecting the Commission's geographic area of concern as indicated in Paragraph 1.1 (Section 21676 (b)).

(b) The adoption or approval of a zoning ordinance or building regulation which (1) affects the Commission's geographic area of concern as indicated in Paragraph 1.1 and (2) involves the types of airport impact concerns listed in Paragraph 1.2 (Section 21676 (b)).

(c) Adoption or modification of the master plan for an existing public-use airport (Section 21676 (c)).

(d) Any proposal for a new airport or heliport whether for public use or private use (Section 21661.5).

1.3.3. *Other Project Review* — Following adoption of a Comprehensive Land Use Plan, state law empowers the Commission to review additional types of land use "actions, regulations, and permits" which might affect airport/land compatibility if the Commission finds that a local agency has not revised its general plan or specific plan or overruled the Commission. This Commission must act to require the local agency to submit these individual actions under the provisions of Section 21676.5 (a). Additionally, the Commission and a local

agency may agree to voluntarily refer these individual actions to the Commission for review. For the purposes of this plan, the specific "actions, regulations, and permits" which the Commission shall review include:

(a) Any proposed expansion of a city's sphere of influence within an airport's planning area.

(b) Any proposed residential development consisting of five or more dwelling units within an airport's planning area.

(c) Any request for variance from a local agency's height limitation ordinance within an airport's planning area.

(d) Any proposal for construction or alteration of a structure (including antennas) taller than 150 feet above the ground anywhere within the County.

(e) Any major capital improvements (e.g., water, sewer, or roads) that would promote urban development within an airport's planning area.

(f) Proposed land acquisition by a government entity (especially, acquisition of a school site) within an airport's planning area.

(g) Any site plan, use permit, building permit, or other use entitlement for any project having a floor area of more than 10,000 square feet or a valuation of more than $1,000,000.

(h) Any other proposed land use action, as determined by the local planning agency, involving a question of compatibility with airport activities.

1.4. Review Process

1.4.1. *Timing of Project Submittal* — Proposed actions listed in Paragraph 1.3.1 must be submitted to the Commission for review prior to approval by the local government entity. All projects should be referred to the Commission at the earliest reasonable point in time so that the Commission's review can be duly considered by the local jurisdiction prior to formalizing its actions. At the local government's discretion, submittal of a project for Airport Land Use Commission review can be done before, after, or concurrently with review by the local planning commission or other local advisory bodies. This discretion gives the local agency the ability to obtain the ALUC review at the most effective point in the review process. The timing may vary depending upon the nature of the specific project.

1.4.2. *Commission Action Choices* — When reviewing a land use project proposal, the Airport Land Use Commission has a choice of either of two actions: (1) find the project *consistent* with the *Airport Land Use Compatibility Plan*; or, (2) find the project *inconsistent* with the Plan. In making a finding of inconsistency, the Commission may note the conditions under which the project would

be consistent with the Plan. The Commission cannot, however, find a project consistent with the Plan subject to the inclusion of certain conditions in the project.

1.4.3. *Subsequent Review* — Once a project has been found consistent with the *Airport Land Use Compatibility Plan*, it need not be referred for review at subsequent stages of the planning process (e.g., for a general plan amendment and again for a zoning change) unless: (1) major changes to the project are made during subsequent review and consideration by the local jurisdiction; or (2) the local jurisdiction agrees that further review is warranted.

1.4.4. *Response Time* — The Airport Land Use Commission must respond to a local agency's request for a consistency determination on a project within 60 days of referral (Section 21676 (d)). If the Commission fails to make the determination within that period, the proposed action shall be deemed consistent with the *Airport Land Use Compatibility Plan*. Regardless of Commission action or failure to act, the proposed action must also comply with other applicable local, state, and federal regulations and laws.

1.4.5. *Airport Master Plans* — When reviewing airport master plans for existing airports, the Commission has three action choices:

(a) Find the airport master plan consistent with the *Airport Land Use Compatibility Plan*.

(b) Disapprove the airport master plan on the basis that it is inconsistent with the Commission's Plan.

(c) Modify the *Airport Land Use Compatibility Plan* (after duly noticed public hearing) to reflect the assumptions and proposals in the airport master plan.

1.4.6. *New Airports and Heliports* — When reviewing proposals for new airports or heliports, the Commission's choices of action are:

(a) Approve the proposal as being consistent with the specific review policies listed in Section 2.3 below.

(b) Approve the proposal and adopt a Compatibility Plan for that facility. Adoption of such a plan is required if the airport or heliport will be a public-use facility.

(c) Disapprove the proposal on the basis that the noise, safety impacts it would have on surrounding land uses are not adequately mitigated.

2. PRIMARY REVIEW POLICIES

2.1. Land Use Actions

2.1.1. *Project Submittal Information* — A proposed land use action submitted to the Commission for review shall include the following information:

(a) An accurately scaled map showing the relationship of the project site to the airport boundary and runways.

(b) If applicable, a detailed site plan showing ground elevations, the location of structures, open spaces, and water bodies, and the heights of structures and trees.

(c) A description of permitted or proposed land uses and restrictions on the uses.

(d) For residential uses, an indication of the potential or proposed number of dwelling units per acre; or, for non-residential uses, the number of people potentially occupying the total site or portions thereof at any one time.

2.1.2. *Primary Criteria* — The compatibility of land uses in the vicinity of the airports covered by this plan shall primarily be evaluated in terms of: (1) the Compatibility Criteria table (Table 2A) and accompanying notes; (2) the Compatibility Plan for each airport; and (3) specific policies established for individual airports.

2.1.3. *Supporting Policies* — Additional evaluation criteria are provided in the Supporting Policies which follow (Section 3). The Commission may refer to these additional policies to clarify or supplement its review.

2.1.4. *Reconstruction* — Where an *existing* incompatible development has been partially or fully destroyed, it may be allowed to be rebuilt to a density not exceeding that of the original construction. This exception does not apply within Compatibility Zones A and B.

2.1.5. *Infill* — Where substantial incompatible development already exists, additional infill development of similar land uses may be allowed to occur even if such land uses are to be prohibited elsewhere in the zone. This exception does not apply within the Compatibility Zones A and B. Projects can be considered "infill" if they meet *all* of the following criteria:

(a) The Airport Land Use Commission has determined that "substantial development" already exists.

(b) The project site is bounded by uses similar to those proposed.

(c) The proposed project would not extend the perimeter of the area developed with incompatible uses.

(d) The proposal does not otherwise increase the intensity and/or incompatibility of use through use permits, density transfers or other strategy.

(e) The infill area has been identified by the local jurisdiction in its general plan or related document and approved by the Commission.

2.1.6. *Land Use Conversion* — The compatibility of uses in the airport planning areas shall be preserved to the maximum feasible extent. The conversion of land from existing or planned agricultural, industrial or commercial use to residential uses within any airport's traffic area (Compatibility Zones A, B, and C) is strongly discouraged.

2.2. Master Plans for Existing Airports

2.2.1. *Project Submittal Information* — An airport master plan submitted to the Commission for review shall contain sufficient information to enable the Commission to adequately assess the noise, safety, overflight, and height restriction impacts of airport activity upon surrounding land uses. A master plan report should be submitted, if available. At a minimum, information to be submitted shall include:

(a) A layout plan drawing of the proposed facility showing the location of: (1) property boundaries; (2) runways or helicopter takeoff and landing areas; and (3) runway protection zones or helicopter approach/departure zones.

(b) Airspace surfaces in accordance with Federal Aviation Regulations, Part 77.

(c) Activity forecasts, including the number of operations by each type of aircraft proposed to use the facility.

(d) Proposed flight track locations and projected noise contours or other relevant noise impact data.

(e) A map showing existing and planned land uses in the vicinity of the proposed airport or heliport.

(f) Identification and proposed mitigation of impacts on surrounding land uses.

2.2.2. *Substance of Review* — When reviewing airport master plans, the Commission shall determine whether activity forecasts or proposed facility development identified in the plan differ from the forecasts and development assumed for that airport in this *Airport Land Use Compatibility Plan*. Attention should specifically focus on:

(a) Activity forecasts that are: (1) significantly higher than those in the *Airport Land Use Compatibility Plan*; or which (2) include a higher proportion of larger or noisier aircraft.

(b) Proposals to: (1) construct a new runway or helicopter takeoff and landing area; (2) change the length, width, or landing threshold location on an existing runway; or (3) establish an instrument approach procedure.

2.2.3. *Consistency Determination* — The Commission shall determine whether the proposed airport master plan is consistent with the *Airport Land Use Compatibility Plan*. The Commission shall base its determination of consistency on findings that the forecasts and development identified in the airport master plan would not result in greater noise, overflight, and safety impacts or height restrictions on surrounding land uses than are presently assumed in the *Airport Land Use Compatibility Plan*.

2.3. Plans for New Airports or Heliports

2.3.1. *Project Submittal Information* — When submitted to the Commission for review, a proposal for a new airport or heliport shall include the same types of information required by Paragraph 2.2.1.

2.3.2. *Substance of Review* — In reviewing proposals for new airports and heliports, the Commission shall focus on the noise, safety, overflight, and height limit impacts upon surrounding land uses.

(a) Other types of environmental impacts (e.g., air quality, water quality, natural habitats, vehicle traffic, etc.) are not within the scope of Commission review.

(b) The Commission shall evaluate the adequacy of the facility design (in terms of federal and state standards) only to the extent that it affects surrounding land use.

(c) The Commission must base its review on the proposed airfield design. The Commission does not have the authority to require alterations to the airfield design.

2.3.3. *Airport/Land Use Relationships* — The review shall examine the relationships between existing and planned land uses in the vicinity of the proposed airport or heliport and the impacts that the proposed facility would have upon these land uses. Questions to be considered should include:

(a) Would the existing or planned land uses be considered incompatible with the airport or heliport if the latter were already in existence?

(b) What measures are included in the airport or heliport proposal to mitigate the noise, safety, and height restriction impacts on surrounding land uses? Such measures might include: (1) location of flight tracks so as to minimize the impacts; (2) other operational procedures to minimize

impacts; (3) acquisition of property interests (fee title or easements) on the impacted land.

3. SUPPORTING COMPATIBILITY CRITERIA

3.1. Noise

3.1.1. *Projected Noise Levels* — The evaluation of airport/land use noise compatibility shall consider the *future* Community Noise Equivalent Level (CNEL) contours of each airport. These contours are calculated based upon aircraft activity forecasts which are set forth in adopted airport master plans or which are considered by the Commission to be plausible (refer to Chapter 4 for noise exposure maps). The Commission should periodically review the projected noise level contours and update them if appropriate.

3.1.2. *Application of Noise Contours* — The locations of CNEL contours are one of the factors used to define compatibility zone boundaries and criteria. It is intended that noise compatibility criteria be applied at the general plan, specific plan, or other broad-scale level. Because of the inherent variability of flight paths and other factors that influence noise emissions, the depicted contour boundaries are not absolute determinants of the compatibility or incompatibility of a given land use. Noise contours can only quantify noise impacts in a general manner; except on large parcels or blocks of land, they should *not* be used as site design criteria.

3.1.3. *Noise Exposure in Residential Areas* — The maximum CNEL considered normally acceptable for residential uses in the vicinity of the airports covered by this plan is 60 dBA.

3.1.4. *Noise Exposure for Other Land Uses* — Noise level standards for compatibility with other types of land uses shall be applied in the same manner as the above residential noise level criteria. Examples of acceptable noise levels for other land uses in an airport's vicinity are presented in Table 2B.

3.1.5. *Other Noise Factors* — The extent of outdoor activity associated with a particular land use is an important factor to be considered in evaluating its compatibility with airport noise. In most locations, noise level reduction measures are only effective in reducing interior noise levels.

3.1.6. *Single-Event Noise Levels* — Single-event noise levels should be considered when evaluating the compatibility of highly noise-sensitive land uses such as schools, libraries, and outdoor theaters. Single-event noise levels are particularly important in areas which are regularly overflown by aircraft, but which

do not produce significant CNEL contours. Flight patterns for each airport (illustrated in Chapter 4) should be considered in the review process. Acoustical studies or on-site noise measurements may be required to assist in determining the compatibility of sensitive uses.

3.2. Safety

3.2.1. *Objective* — The intent of land use safety compatibility criteria is to minimize the risks associated with an off-airport aircraft accident or emergency landing.

(a) Risks both to people and property in the vicinity of an airport and to people on board the aircraft shall be considered.

(b) More stringent land use controls shall be applied to the areas with greater potential risk.

3.2.2. *Risks to People on the Ground* — The principal means of reducing risks to people on the ground is to restrict land uses so as to limit the number of people who might gather in areas most susceptible to aircraft accidents.

(a) A method for determining the concentration of people for various land uses is provided in Appendix C.

3.2.3. *Land Uses of Particular Concern* — Land uses of particular concern are ones in which the occupants have reduced effective mobility or are unable to respond to emergency situations. Schools, hospitals, nursing homes, and other uses in which the majority of occupants are children, the elderly, and the handicapped shall be prohibited within Compatibility Zones A, B, and C.

3.2.4. *Other Risks* — Any use involving the potential for aboveground explosion or the release of toxic or corrosive materials shall be prohibited in Compatibility Zones A and B.

3.2.5. *Open Land* — In the event that an aircraft is forced to land away from an airport, the risks to the people on board can best be minimized by providing as much open land area as possible within the airport vicinity. This concept is based upon the fact that the large majority of aircraft accidents occurring away from an airport runway are controlled emergency landings in which the pilot has reasonable opportunity to select the landing site.

(a) To qualify as open land, an area must be: (1) free of structures and other major obstacles such as walls, large trees, and overhead wires; and (2) have minimum dimensions of at least 75 feet by 300 feet. Roads and automobile parking lots are acceptable as open land areas if they meet the preceding criteria.

(b) Open land requirements for each compatibility zone are to be applied with respect to the entire zone. Individual parcels may be too small to accommodate the minimum-size open area requirement. Consequently, the identification of open land areas must initially be accomplished at the general plan or specific plan level or as part of large-acreage projects.

(c) Clustering of development and providing contiguous landscaped and parking areas is encouraged as a means of increasing the size of open land areas.

(d) Building envelopes and the approach zones should be indicated on all development plans and tentative maps within an airport's planning area in order to assure that individual development projects provide the open land areas identified in a general plan, specific plan, or other large-scale plan.

3.3. Airspace Protection

3.3.1. *Height Limits* — The criteria for limiting the height of structures, trees and other objects in the vicinity of an airport shall be set in accordance with Part 77, Subpart C, of the Federal Aviation Regulations and with the United States Standard for Terminal Instrument Procedures (TERPS). Airspace plans for each airport which depict the critical areas for airspace protection are provided in Chapter 4.

3.3.2. *Avigation Easement Dedication* — The owner of any property proposed for development within Compatibility Zones A and B shall be required to dedicate an avigation easement to the jurisdiction owning the airport.

(a) The avigation easement shall: (1) provide the right of flight in the airspace above the property; (2) allow the generation of noise and other impacts associated with aircraft overflight; (3) restrict the height of structures, trees and other objects; (4) permit access to the property for the removal or aeronautical marking of objects exceeding the established height limit; and (5) prohibit electrical interference, glare, and other potential hazards to flight from being created on the property. An example of an avigation easement is provided in Appendix E.

(b) Within Compatibility Zones A and B, height restrictions of less than 35 feet may be required.

3.3.3. *Minimum Restriction* — Other than within Compatibility Zones A and B, no restrictions shall be set which limit the a height of structures, trees, or other objects to less than 35 feet above the level of the ground on which they are located even if the terrain or objects on the ground may penetrate Federal Aviation Regulations Part 77 surfaces.

(a) In locations within Compatibility Zone C where the ground level exceeds or comes within 35 feet of a Part 77 surface, dedication of an avigation easement limiting heights to 35 feet shall be required in accordance with Paragraph 3.3.2. (This policy may be applicable to future airports; there are no such locations near the existing airports in Madera County.)

3.3.4. *FAA Notification* — Proponents of a project which may exceed a Part 77 surface must notify the Federal Aviation Administration as required by FAR Part 77, Subpart B, and by the California State Public Utilities Code Sections 21658 and 21659. (Notification to the Federal Aviation Administration under FAR Part 77, Subpart B, is required even for certain proposed construction that does not exceed the height limits allowed by Subpart C of the regulations. Refer to Appendix B for the specific Federal Aviation Administration notification requirements.)

(a) Local jurisdictions shall inform project proponents of the requirements for notification to the Federal Aviation Administration.

(b) The requirement for notification to the Federal Aviation Administration shall not necessarily trigger review of an individual project by the Airport Land Use Commission if the project is otherwise in conformance with the compatibility criteria established in the *Airport Land Use Compatibility Plan*.

(c) Any project coming before the Airport Land Use Commission for reason of height-limit issues shall include a copy of FAR Part 77 notification to the Federal Aviation Administration.

3.3.5. *Other Flight Hazards* — Land uses which may produce hazards to aircraft in flight shall not be permitted within any airport's planning area. Specific characteristics to be avoided include: (1) glare or distracting lights which could be mistaken for airport lights; (2) sources of dust, steam, or smoke which may impair pilot visibility; (3) sources of electrical interference with aircraft communications or navigation; and (4) any use which may attract large flocks of birds, especially landfills and certain agricultural uses.

3.4. Overflight

3.4.1. *Nature of Impact* — All locations within an airport's planning area are regarded as potentially subject to routine aircraft overflight. Although sensitivity to aircraft overflights varies from individual to individual, overflight sensitivity is particularly important within residential land uses.

(a) Local jurisdictions shall establish some method of providing notification to prospective buyers of new residential property within an airport's planning area (all compatibility zones). Appropriate measures may include requiring the dedication of avigation or overflight easements, deed notic-

ing, or real estate disclosure statements. Regardless of the methods chosen, the notification shall: (1) indicate the general characteristics of current and projected future airport activity; (2) note that the property is subject to routine overflight by aircraft at low altitudes (at or below traffic pattern altitude); and (3) provide positive assurance that a prospective buyer has received this information. (Refer to Chapter 9 for examples of buyer awareness measures that can be implemented by local land use jurisdictions.)

(b) Local jurisdictions are encouraged to extend the above or similar buyer awareness program to existing residential property within the airport planning areas.

Table 2A

Compatibility Criteria

Madera County Airport Land Use Compatibility Plan

Zone	Location	Impact Elements	Maximum Densities		Required Open Land[3]
			Residential (du/ac)[1]	Other Uses (people/ac)[2]	
A	Runway Protection Zone or within Building Restriction Line	• High risk • High noise levels	0	10	All Remaining
B1	Approach/Departure Zone and Adjacent to Runway	• Substantial risk – aircraft commonly below 400 ft. AGL or within 1,000 ft. of runway • Substantial noise	0.1	60	30%
B2	Extended Approach/Departure Zone	• Significant risk – aircraft commonly below 800 ft. AGL • Significant noise	3	60	30%
C	Common Traffic Pattern	• Limited risk – aircraft at or below 1,000 ft. AGL • Frequent noise intrusion	6	150	15%
D	Other Airport Environs	• Negligible risk • Potential for annoyance from overflights	No limit	No limit	No requirement

Zone	Additional Criteria		Examples	
	Prohibited Uses	Other Development Conditions	Normally Acceptable Uses[4]	Uses Not Normally Acceptable[5]
A	• All structures except ones with location set by aeronautical function • Assemblages of people • Objects exceeding FAR Part 77 height limits • Hazards to flight[6]	• Dedication of avigation easement	• Aircraft tiedown apron • Pastures, field crops, vineyards • Automobile parking	• Heavy poles, signs, large trees, etc.
B1 and B2	• Schools, day care centers, libraries • Hospitals, nursing homes • Highly noise-sensitive uses • Storage of highly flammable materials • Hazards to flight[6]	• Locate structures maximum distance from extended runway centerline • Minimum NLR[7] of 25 dBA in residential and office buildings • Dedication of avigation easement	• Uses in Zone A • Any agricultural use except ones attracting bird flocks • Warehousing, truck terminals • Single-story offices	• Suburban residential subdivisions • Intensive retail uses • Intensive manufacturing or food processing uses • Two-story offices • Hotels and motels
C	• Schools • Hospitals, nursing homes • Hazards to flight[6]	• Dedication of overflight easement for residential uses	• Uses in Zone B • Parks, playgrounds • Low-intensity retail, offices, etc. • Low-intensity manufacturing, food processing • Two-story motels	• Shopping malls • Theaters, auditoriums • Sports stadiums • Office buildings with 4 or more stories
D	• Hazards to flight[6]	• Deed notice required for residential development	• All except ones hazardous to flight	

Table 2A Continued

Compatibility Criteria

Madera County Airport Land Use Compatibility Plan

NOTES

1 Residential development should not contain more than the indicated number of dwelling units per gross acre. Clustering of units is encouraged as a means of meeting the Required Open Land requirements.

2 The land use should not attract more than the indicated number of people per acre at any time. This figure should include all individuals who may be on the property (e.g., employees, customers/visitors, etc.). These densities are intended as general planning guidelines to aid in determining the acceptability of proposed land uses. See Appendix C for guidance on determining occupancy loads.

3 See Policy 3.2.5.

4 These uses typically can be designed to meet the density requirements and other development conditions listed.

5 These uses typically do not meet the density and other development conditions listed. They should be allowed only if a major community objective is served by their location in this zone and no feasible alternative location exists.

6 See Policy 3.3.5.

7 NLR = Noise Level Reduction; i.e., the attenuation of sound level from outside to inside provided by the structure.

BASIS FOR COMPATIBILITY ZONE BOUNDARIES

The following general guidelines are used in establishing the Compatibility Zone boundaries for each airport depicted in Chapter 3. Modifications to the boundaries may be made to reflect specific local conditions such as existing roads, property lines, and land uses.

A The boundary of this zone for each airport is defined by the runway protection zones (formerly called runway clear zones) and the airfield building restriction lines.

Runway protection zone dimensions and locations are set in accordance with Federal Aviation Administration standards for the proposed future runway location, length, width, and approach type as indicated on an approved Airport Layout Plan. If no such plan exists, the existing runway location, length, width, and approach type are used.

The building restriction line location indicated on an approved Airport Layout Plan is used where such plans exist. For airports not having an approved Airport Layout Plan, the zone boundary is set at the following distance laterally from the runway centerline:

Visual runway for small airplanes	370 feet
Visual runway for large airplanes	500 feet
Nonprecision instrument runway for large airplanes	500 feet
Precision instrument runway	750 feet

These distances allow structures up to approximately 35 feet height to remain below the airspace surfaces defined by Federal Aviation Regulations Part 77.

B1 The outer boundary of the Approach/Departure Zone is defined as the area where aircraft are commonly below 400 feet above ground level (AGL). For visual runways, this location encompasses the base leg of the traffic pattern as commonly flown. For instrument runways, the altitudes established by approach procedures are used. Zone B1 also includes areas within 1,000 feet laterally from the runway centerline.

B2 The Extended Approach/Departure Zone includes areas where aircraft are commonly below 800 feet AGL on straight-in approach or straight-out departure. It applies to runways with more than 500 operations per year by large aircraft (over 12,500 pounds maximum gross takeoff weight) and/or runway ends with more than 10,000 total annual takeoffs.

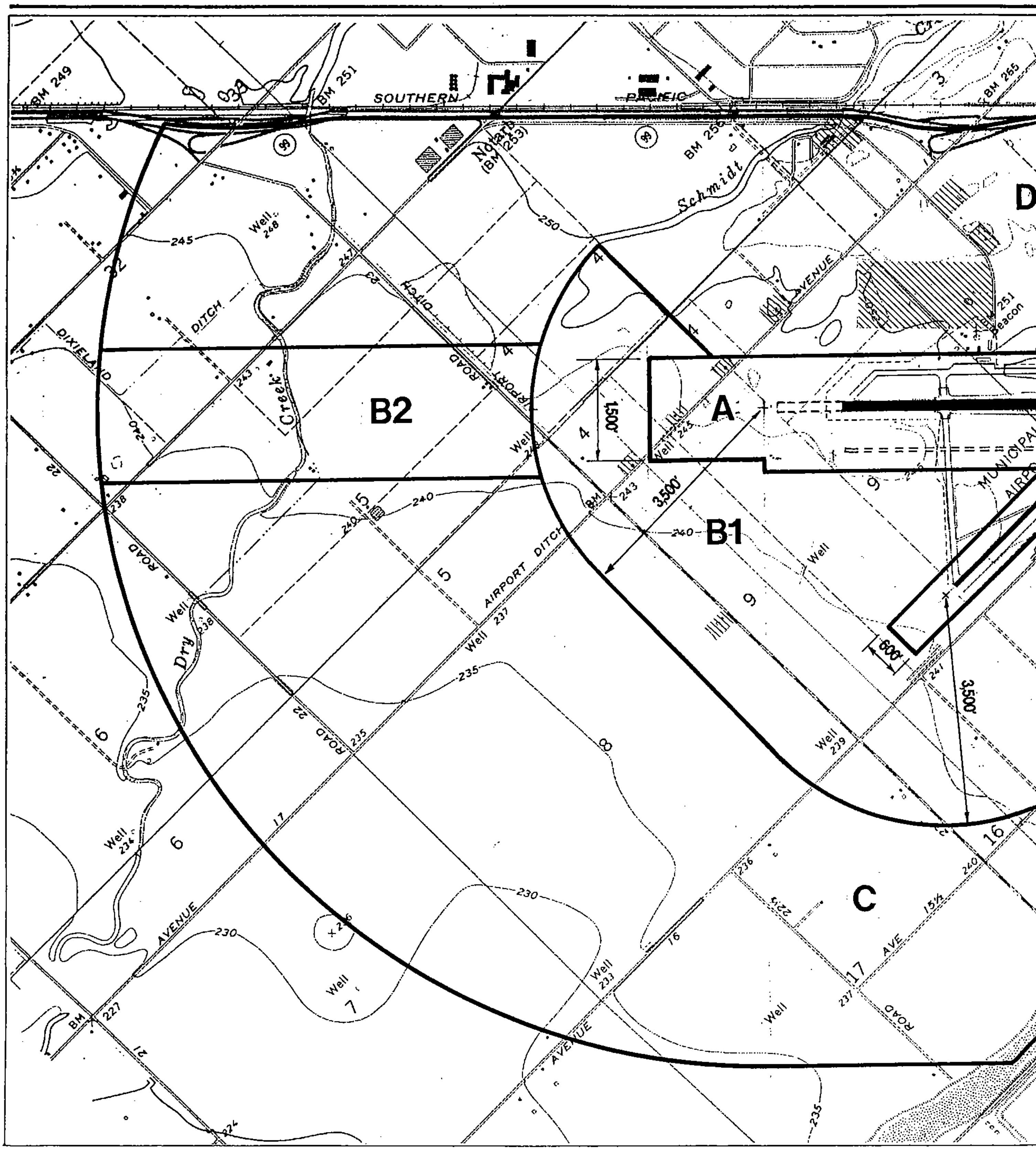
C The outer boundary of the Common Traffic Pattern Zone is defined as the area where aircraft are commonly below 1,000 feet AGL (i.e., the traffic pattern and pattern entry points). This area is considered to extend 5,000 feet laterally from the runway centerline and from 5,000 to 10,000 feet longitudinally from the end of the runway primary surface. The length depends upon the runway classification (visual versus instrument) and the type and volume of aircraft accommodated. For runways having an established traffic solely on one side, the shape of the zone is modified accordingly.

Table 2B

Noise Compatibility Criteria

LAND USE CATEGORY	CNEL, dBA 50-55	55-60	60-65	65-70	70-75
Residential					
single family, nursing homes, mobile homes	+	o	–	– –	– –
multi-family, apartments, condominiums	++	+	o	– –	– –
Public					
schools, libraries, hospitals	+	o	–	– –	– –
churches, auditoriums, concert halls	+	o	o	–	– –
transportation, parking, cemeteries	++	++	++	+	o
Commercial and Industrial					
offices, retail trade	++	+	o	o	–
service commercial, wholesale trade, warehousing, light industrial	++	++	+	o	o
general manufacturing, utilities, extractive industry	++	++	++	+	+
Agricultural and Recreational					
cropland	++	++	++	++	+
livestock breeding	++	+	o	o	–
parks, playgrounds, zoos	++	+	+	o	–
golf courses, riding stables, water recreation	++	++	+	o	o
outdoor spectator sports	++	+	+	o	–
amphitheaters	+	o	–	– –	– –

LAND USE AVAILABILITY		INTERPRETATION/COMMENTS
++	Clearly Acceptable	The activities associated with the specified land use can be carried out with essentially no interference from the noise exposure.
+	Normally Acceptable	Noise is a factor to be considered in that slight interference with outdoor activities may occur. Conventional construction methods will eliminate most noise intrusions upon indoor activities.
o	Marginally Acceptable	The indicated noise exposure will cause moderate interference with outdoor activities and with indoor activities when windows are open. The land use is acceptable on the conditions that outdoor activities are minimal and construction features which provide sufficient noise attenuation are used (e.g., installation of air conditioning so that windows can be kept closed). Under other circumstances, the land use should be discouraged.
–	Normally Unacceptable	Noise will create substantial interference with both outdoor and indoor activities. Noise intrusion upon indoor activities can be mitigated by requiring special noise insulation construction. Land uses which have conventionally constructed structures and/or involve outdoor activities which would be disrupted by noise should generally be avoided.
– –	Clearly Unacceptable	Unacceptable noise intrusion upon land use activities will occur. Adequate structural noise insulation is not practical under most circumstances. The indicated land use should be avoided unless strong overriding factors prevail and it should be prohibited if outdoor activities are involved.


A
B1
B2
C
D
1500'
3,500'
600'
3,500'
SOUTHERN
PACIFIC
Schmidt
DIXIELAND
DITCH
Creek
Dry
AIRPORT DITCH
AIRPORT ROAD
ROAD
AVENUE
17 AVE.
MUNICIPAL
AIRPORT
Beacon
Well

3

Individual Airport Policies and Compatibility Maps

GENERAL

The Compatibility Maps contained in this chapter are to be used in conjunction with the Compatibility Criteria set forth in Table 2A.

The Compatibility Zones shown on each map represent areas in which the land use compatibility concerns are similar in character. The zone boundaries reflect a composite of the four basic compatibility concerns – noise, safety, overflight, and airspace.

Initially, the impact area for each of these compatibility concerns was delineated for a set of runways having different approach types (visual versus straight-in nonprecision), type of civilian aircraft accommodated (single-engine and light twins versus turboprops, business jets, etc.), and activity level. Next, several composite templates were prepared. These templates were then applied to each airport runway and modified to take into account aircraft traffic pattern restrictions, distinct geographic features on the ground, and other factors peculiar to each individual airport.

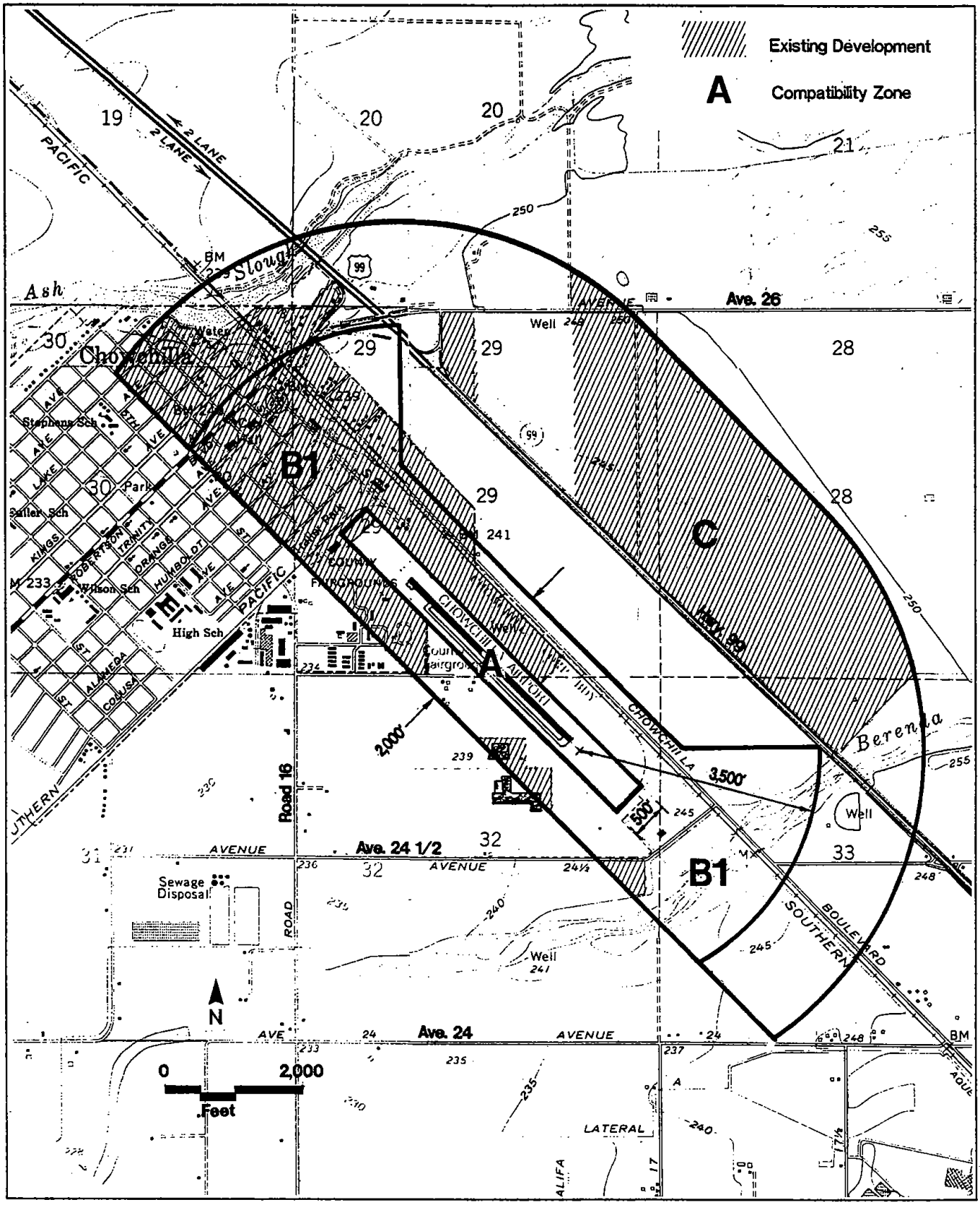


Figure 3A

Compatibility Map

Chowchilla Municipal Airport

Part II

Supporting Information

4

Background Data

Madera County Airports

INTRODUCTION

This chapter contains background information relevant to land use compatibility planning for the areas surrounding each of the airports covered by the *Airport Land Use Compatibility Plan*. The information is current as of the latter part of 1991.

For each airport, the following information is presented:

- **Overview** — A short discussion of the major airport/land use compatibility issues presently existing or anticipated in the future.
- **Airport Features** — A listing of the principal physical features and services of the airport. The emphasis is on data having potential implications for land use compatibility.
- **Airport Plan** — A diagram of the airport layout. Runways, runway protection zones, and airport boundaries are emphasized.
- **Airport Environs** — A description of existing and planned land uses in the airport vicinity.
- **Land Use Map** — A simplified map of planned land uses in the surrounding area.
- **Noise Model Input Data** — Data regarding forecast future airport activity. The future levels are nominally for a date approximately 20 years in the future. However, given the uncertainty in the general aviation sector, the timeframe may be well beyond 20 years.
- **Noise Contours** — A map depicting future contours of the airport. The contours are generated from the activity levels indicated in the airport activity table.
- **Airspace Plan** — An illustration of the height limit surfaces defined by Part 77 of the Federal Aviation Regulations.

Chowchilla Municipal Airport

OVERVIEW

The Chowchilla Municipal Airport serves single-engine and light, twin-engine propeller aircraft. A significant proportion of the operations by single-engine aircraft are by aerial applicator (crop duster) aircraft. Because of the close proximity of the Airport to the City, aerial applicator aircraft normally use tight landing and departure patterns to avoid overflying residences. The City owns in fee simple the property underlying the runway protection zone for Runway 30 and most of the runway protection zone for Runway 12. Over the balance of the runway protection zone for Runway 12, the City has an easement which restricts future development.

The area within the originally platted portion of Chowchilla is fully developed and therefore largely outside of the authority of the Madera County ALUC. The principal location where new development is potentially of concern to the Commission is the areas north and east of the Airport, including the newly annexed area east of Highway 99. Safety is the main concern over the commercially- and industrially-designated areas between the railroad tracks and Highway 99. Noise is the principal concern for the residentially-designated areas east of Highway 99. To a lesser degree, safety is a concern on the commercially- and industrially-designated areas southeast of the Airport.

Table 4A

Airport Features

Chowchilla Municipal Airport

AIRPORT PROPERTY

- Ownership – City of Chowchilla.
- Elevation – 242 feet MSL.

AIRPORT PLANNING

- Adopted Plans – Airport Layout Plan adopted April 1974; most recent revision June 1990.
- Planned improvements – Additional T-hangars; card-lock gate.

BUILDING AREA

- Location – southwest side of field.
- Principal Facilities – Two banks of hangars and tiedown apron.
- Services – One aerial applicator.

RUNWAY SYSTEM

Runway 12-30

- Critical Aircraft – Light, twin-engine propeller-driven aircraft.
- Classification – Basic Utility Stage II.
- Dimensions – 3,250 feet long, 60 feet wide.
- Lighting – Medium intensity runway lights; visual approach slope indicator for Runway 30.
- Surface – Asphalt, good condition.

RUNWAY APPROACHES

Runway 12-32

- Approach Types – visual to both ends.
- Runway Protection Zones – Fee simple ownership for Runway 30; portion for Runway 12 fee simple and portion easement.

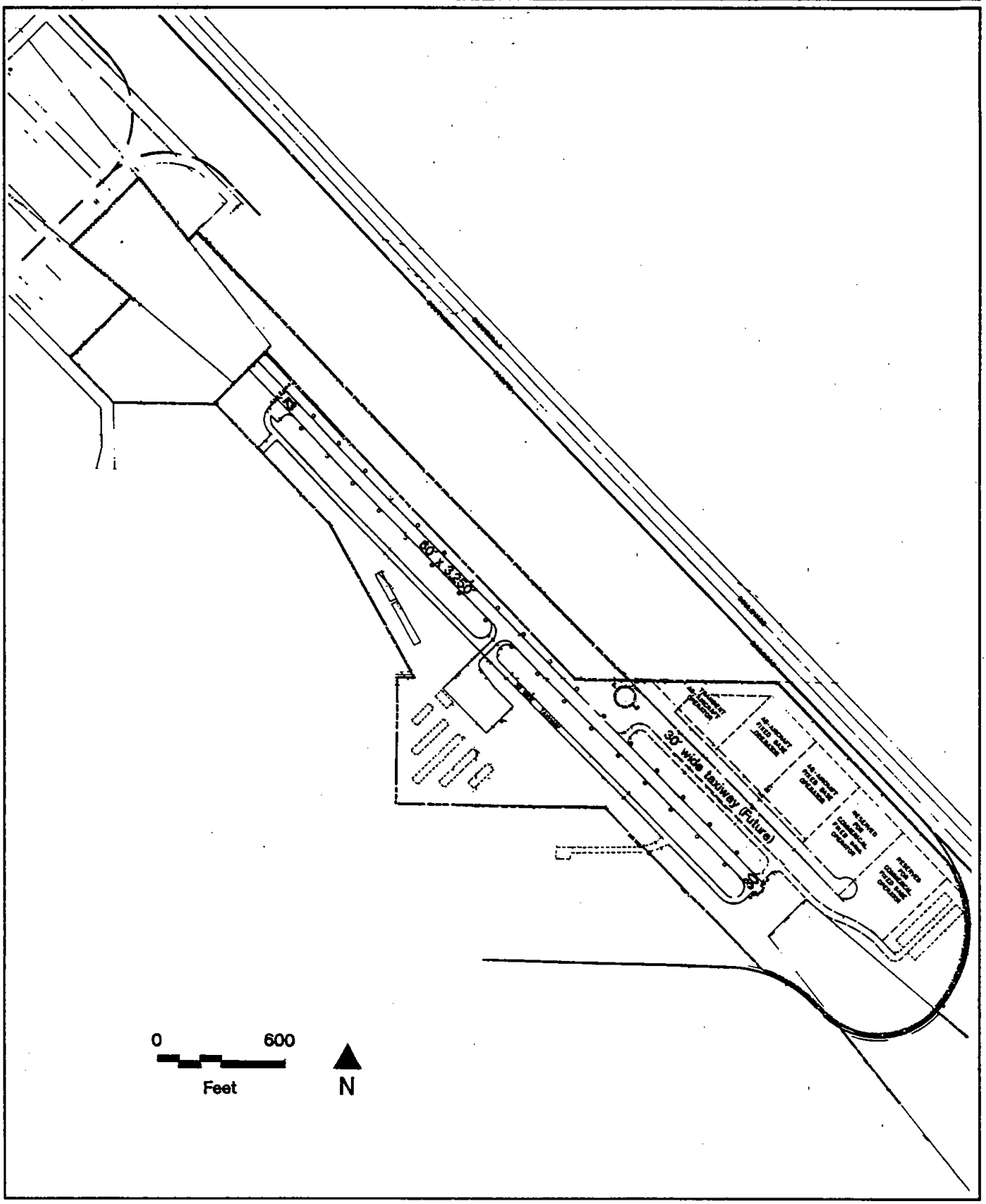


Figure 4A

Airport Plan

Chowchilla Municipal Airport

Table 4B

Airport Environs

Chowchilla Municipal Airport

AIRPORT LOCATION AND ACCESS

- Located in the southeast corner of City of Chowchilla approximately one mile from the city center.
- Airport property is entirely within the city limits.
- Southern approach zones within City's sphere of influence but not currently within city limits.
- Airport bordered on west by Southern Pacific rail lines.
- Access via Avenue 25 on southwest side of the Airport.

EXISTING AIRPORT AREA LAND USES

General Character

- Airport adjacent to existing urban area. New urban development planned to occur to west and northeast.
- Predominantly agricultural uses to south and southeast.

Runway Approaches

- Runway 12 (northwest) Approach – Residential uses one-quarter mile from end of runway; city commercial center approximately one-half mile from end of runway.
- Runway 30 (southeast) Approach – Agricultural uses.

Traffic Pattern

- Both patterns northeast of Airport; right-hand traffic to Runway 30.
- Predominantly agricultural uses beneath traffic pattern. Downwind portion of patterns is generally inside of or over Highway 99.

LOCAL LAND USE PLANS AND ZONING

- *City of Chowchilla General Plan* adopted in April 1986.
  - Industrial uses shown for area south and west of Airport.
  - Commercial and industrial uses proposed for area between the Airport and Highway 99.
  - Golf course with residential and commercial use proposed for area northeast of the Airport across Highway 99.
- City sphere of influence extends at least one mile in all directions.

PLANNED DEVELOPMENT IN AIRPORT AREA

- First phase of commercial and residential uses northeast of the Airport anticipated to begin construction in near future.
- Ongoing industrial development west, south and southeast of the Airport.

ESTABLISHED APPROACH PROTECTION MEASURES

- City and County ordinances designate 60 CNEL as the maximum normally acceptable for residential and noise sensitive uses.
- City and County ordinances limit the height of objects underlying the Airport's FAR Part 77 surfaces.

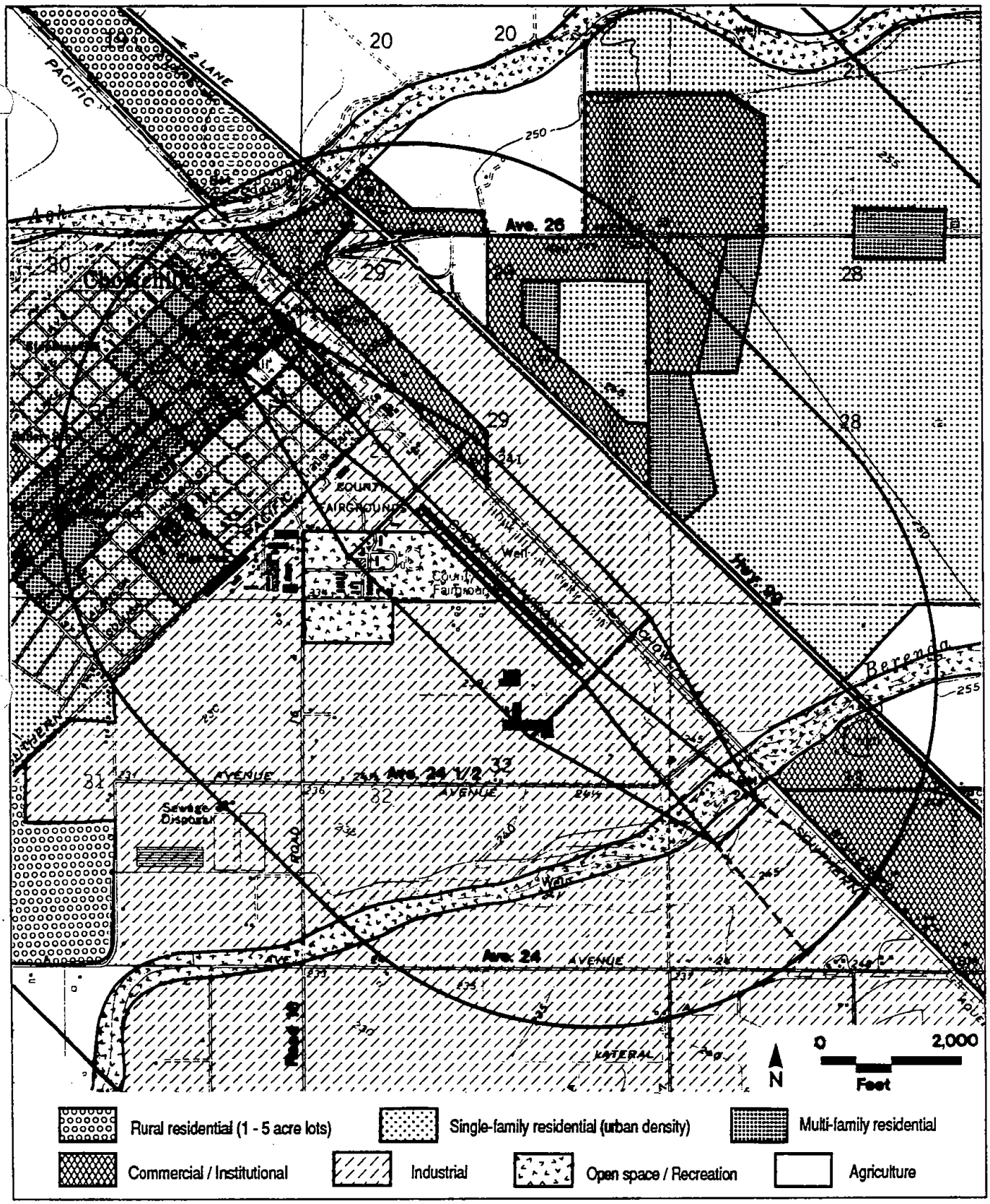


Figure 4B

Existing Land Use Designations

Chowchilla Municipal Airport

Table 4C

Noise Model Input Data

Chowchilla Municipal Airport

AIRCRAFT MIX
(Forecast 2011 Activity Level)

Aircraft Type	Total Operations		
	Annual	Average Day	Percentage
Single-Engine, Fixed Pitch	10,500	28.77	50
Single-Engine, Variable Pitch	3,150	8.63	15
Light Twin-Engine, Piston (e.g. Beech Baron)	1,050	2.88	5
Ag Aircraft (600 HP)	3,150	8.63	15
Ag Aircraft (300 HP)	3,150	8.63	15
Total	21,000	57.53	100

TIME OF DAY
(Forecast 2011)

Aircraft Type	Total Operations			
	Type of Operation	Day 7:00 a.m. 7:00 p.m.	Evening 7:00 p.m. 10:00 p.m.	Night 10:00 p.m. 7:00 a.m.
Single-Engine, Fixed pitch	Ldg & T/O	90	9	1
Single-Engine, Variable pitch	Ldg & T/O	90	9	1
Light Twin-Engine, Piston (e.g. Beech Baron)	Ldg & T/O	90	9	1
Ag Aircraft (600 HP)	Ldg & T/O	90	0	10
Ag Aircraft (300 HP)	Ldg & T/O	90	0	10

RUNWAY UTILIZATION

Aircraft Type	Percentage of Landings		Percentage of Takeoffs	
	Rwy 12	Rwy 30	Rwy 12	Rwy 30
Single-Engine, Fixed pitch	12	88	12	88
Single-Engine, Variable pitch	12	88	12	88
Light Twin-Engine, Piston (e.g., Beech Baron)	12	88	12	88
Ag Aircraft (600 HP)	12	88	12	88
Ag Aircraft (300 HP)	12	88	12	88

Table 4C - Continued

Noise Model Input Data

Chowchilla Municipal Airport

FLIGHT TRACKS - LANDINGS				
Aircraft Type	Runway 12	Runway 30		
	Track L1	Track L2	Track L3	Track L4
Single-Engine, Fixed pitch	100	0	90	10
Single-Engine, Variable pitch	100	0	90	10
Light Twin-Engine, Piston (e.g., Beech Baron)	100	0	0	100
Ag Aircraft (600 HP)	100	5	50	0
Ag Aircraft (300 HP)	100	50	50	0

FLIGHT TRACKS - TAKEOFFS							
Aircraft Type	Runway 12			Runway 30			
	Track T1	Track T2	Track T3	Track T4	Track T5	Track T6	Track T7
Single-Engine, Fixed Pitch	100	0	0	100	0	0	0
Single-Engine, Variable Pitch	100	0	0	100	0	0	0
Light Twin-Engine, Piston (e.g., Beech Baron)	100	0	0	100	0	0	0
Ag Aircraft (600 HP)	0	40	60	0	40	30	30
Ag Aircraft (300 HP)	0	40	60	0	40	30	30

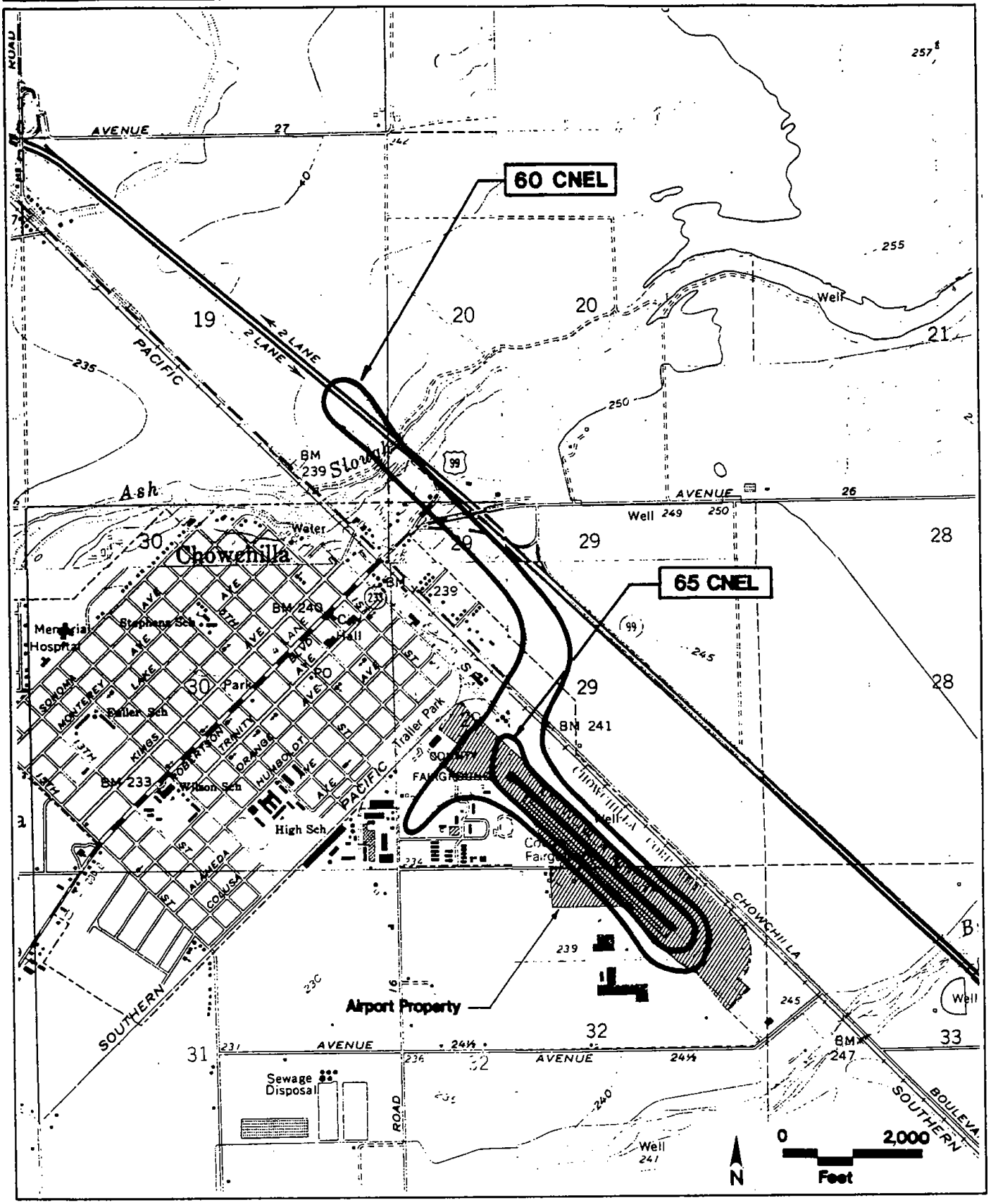
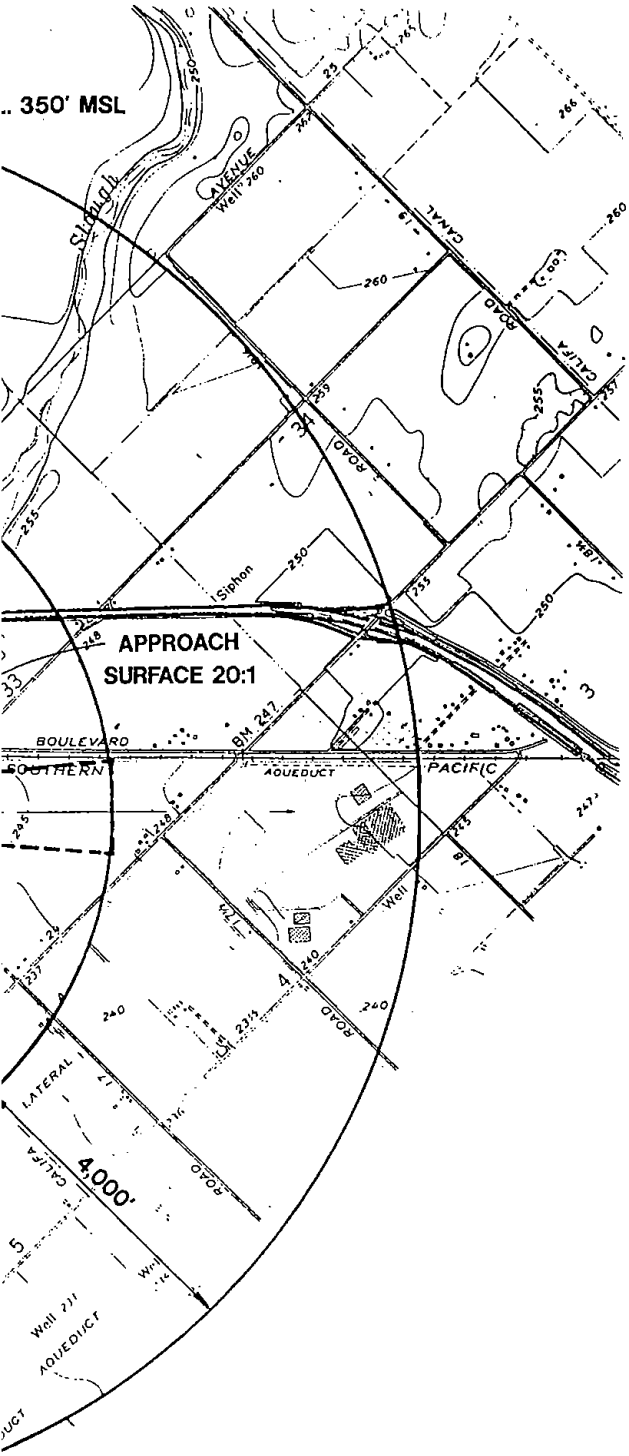
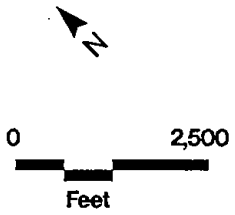


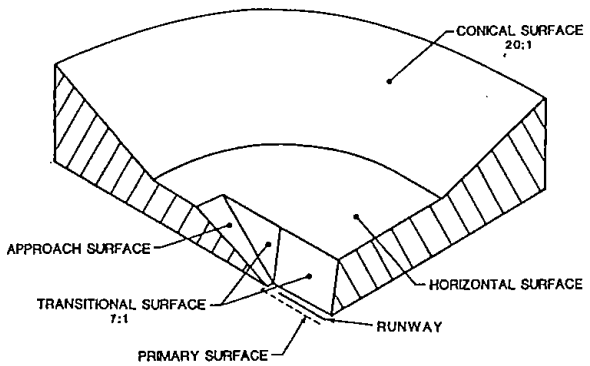
Figure 4C

Noise Contours 2011

Chowchilla Municipal Airport







ISOMETRIC VIEW

TYPICAL FAR PART 77 SURFACES

Figure 4D

Airspace Plan

Chowchilla Municipal Airport

Madera Municipal Airport

OVERVIEW

The Madera Municipal Airport serves: single- and twin-engine, piston aircraft; twin-engine turbo-prop aircraft (both business and airline training); and, less frequently, turbojets and helicopters. An aerial applicator (crop duster) is based at the Airport. Aerial applicator aircraft use Runway 7-25 exclusively. The City owns all of the property within the Airport current runway protection zones, as well as most of the property within the runway protection zones proposed for the future. The Federal Aviation Administration recently proposed to fund the development of an Instrument Landing System for Runway 30.

Only limited development has as yet occurred southeast of the Airport. However, substantial investments in infrastructure has been made and residential and commercial development is anticipated. Between the Airport and Highway 99, industrial, commercial and higher-density residential development is planned. The City has defined an Approach Zone and an Extended Runway Protection Zone for Runway 30. These zones limit development densities under the approach to this runway.

Noise and limited safety concerns apply to the areas southeast and northwest of the Airport. Noise is also a concern south and west of the Airport in areas currently affected by overflight by aircraft landing on Runway 30 and aerial applicator operations on Runway 7-25. This area would also be affected if Runway 12R-30L is constructed.

Table 4D

Airport Features

Madera Municipal Airport

AIRPORT PROPERTY

- Ownership – City of Madera.
- Elevation – 253 feet MSL.

AIRPORT PLANNING

- Adopted Plans – Airport Master Plan and Airport Layout Plan adopted April 1981. Final draft of updated Airport Master Plan and Layout Plan submitted to City in June 1990; adoption pending completion of environmental processing associated with new City General Plan.
- Planned Improvements – In the near term, additional T-hangars; extension of Runway 12-30; and Instrument Landing System. Possible long-term development of a parallel runway (Runway 12R-30L).

BUILDING AREA

- Location – northeast side of field.
- Principal Facilities – Terminal building, large aircraft hangars, T-hangars, fuel island, based and transient tiedowns.
- Services – Full range of services including fueling, maintenance, flight instruction and aircraft rental.

RUNWAY SYSTEM

Runway 12-30

- Critical Aircraft – Medium, twin-engine business turbojet.
- Classification – General Utility Stage II.
- Dimensions – Currently 4,500 feet long, 150 feet wide; future 5,500 feet long, 100 feet wide.
- Lighting – Medium intensity runway lights; visual approach slope indicator and runway end identifier lights for Runway 30.
- Surface – Asphalt, good condition.

Runway 7-25

- Critical Aircraft – Aerial Applicator.
- Classification – Restricted.
- Dimensions – Currently 3,980 feet long, 150 feet wide; future 3,200 feet long, 60 feet wide.
- Lighting – none.
- Surface – Asphalt, fair condition.

Runway 12R-30L (proposed)

- Critical Aircraft – Light, twin-engine propeller.
- Classification – General Utility Stage I.
- Dimensions – 3,800 feet long, 75 feet wide.
- Lighting – none.

RUNWAY APPROACHES

Runway 12-32

- Approach Types – Currently visual to Runway 12, nonprecision to Runway 30; future nonprecision to Runway 12, precision (Instrument Landing System) to Runway 30.
- Runway Protection Zones – Currently fee simple ownership for both runway ends; future fee simple for most of both runway ends and easement for remainder.

Runway 7-25

- Approach Types – Visual to both ends.
- Runway Protection Zones – Fee simple ownership of both ends.

Runway 12R-30L

- Approach Types – Visual to both ends.
- Runway Protection Zones – Fee simple ownership of both ends.

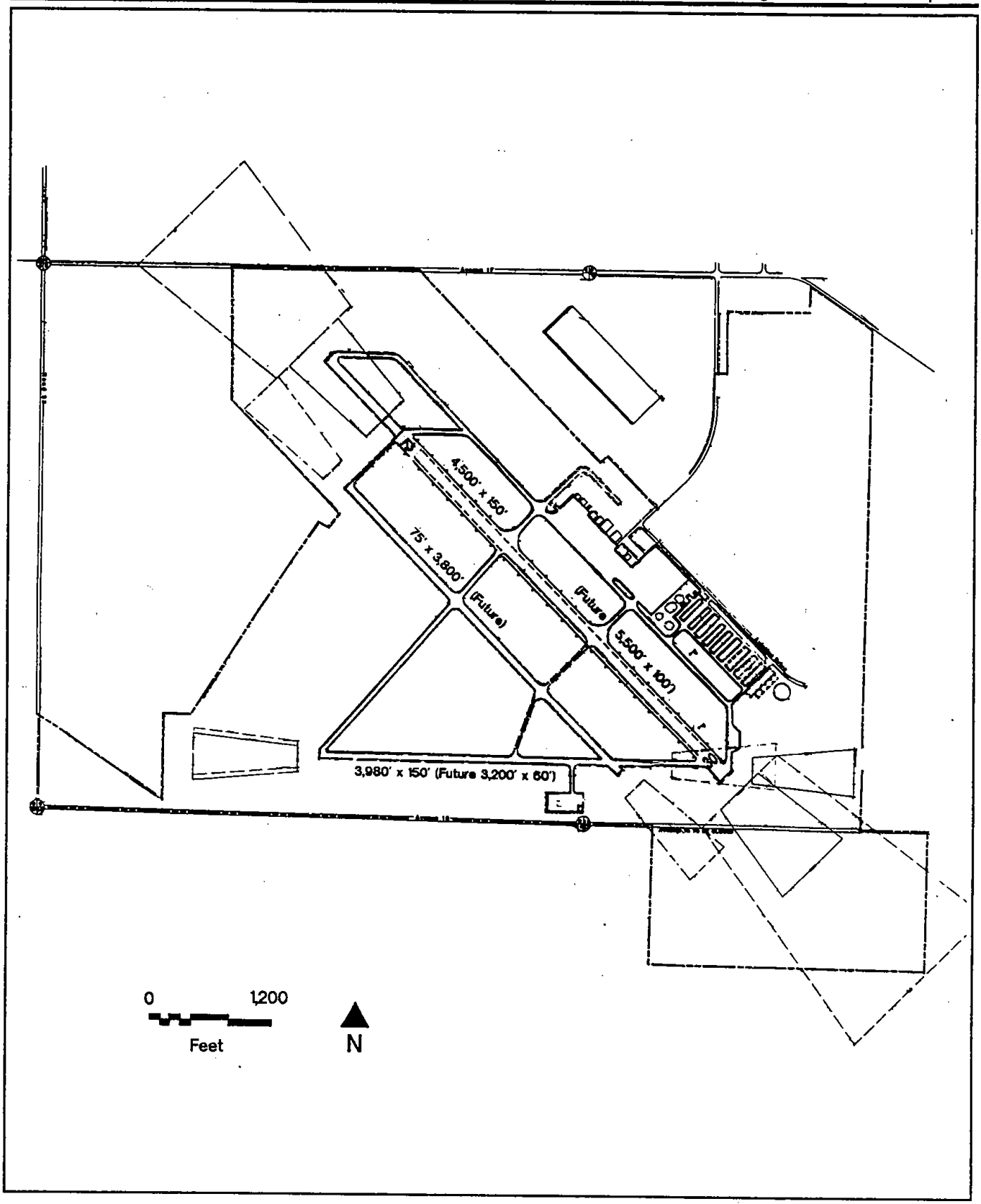


Figure 4E

Airport Plan

Madera Municipal Airport

Table 4E

Airport Environs

Madera Municipal Airport

AIRPORT LOCATION AND ACCESS

- Located in the northwest corner of the City of Madera approximately three miles from the city center.
- Airport property is entirely within the city limits.
- Southeastern runway approach zones within city limits.
- Highway 99 located three-quarters of a mile to the east of the Airport.
- Access is from Airport Drive via Avenue 17.

EXISTING AIRPORT AREA LAND USES

General Character

- Airport is on the developing edge of the City. New urban development is occurring to the south and east.
- Agricultural uses predominate to the north, west and south.

Runway Approaches

- Runway 12 and 12R (northwest) Approaches – Agricultural uses and a small number of houses on five-acre lots.
- Runway 30 and 30L (southeast) Approaches – Scattered new residential subdivisions surrounded by undeveloped and agricultural lands.
- Runway 7 (west) Approach – Agricultural uses.
- Runway 25 (east) Approach – Undeveloped and agricultural uses, and one mobile home park.

Traffic Pattern

- Exclusively agricultural uses beneath the pattern west of the Airport.
- East of the Airport are a mixture of industrial and commercial uses with most of the land currently undeveloped.
- Extended pattern to Runway 30 includes urbanized areas south of the Fresno River.

LOCAL LAND USE PLANS

- City of Madera sphere of influence includes Airport and area to southeast.
- *City of Madera General Plan* adopted June 1982 designates industrial, commercial and high-density residential uses east of the Airport.
- *Specific Plan Number 1* adopted June 1981 encompasses the area southeast of the Airport.
  - Defines an "Approach Zone" encompassing the runway protection zone for Runway 30 and designates open space uses for most of this zone.
  - Defines a 1,000-foot wide corridor along the extended centerline of Runway 30 as an "Extended Runway Protection Zone". Within this zone residential densities are limited: minimum lot size is 12,000 square feet.
- *County of Madera General Plan* adopted circa 1969 designates agricultural and large-lot rural residential uses north and west of the Airport.

PLANNED DEVELOPMENT IN AIRPORT AREA

- New residential subdivisions are anticipated southeast and south of the Airport. High-density single-family and multi-family residences as well as commercial and industrial uses are actively being planned east of the Airport.

ESTABLISHED APPROACH PROTECTION MEASURES

- Standard avigation easement obtained by City on new residential subdivisions in the Airport's environs.
- Approach zone and extended runway protection zone (previously mentioned) restrict densities in most sensitive areas near the Airport.
- City and County ordinances designate 60 CNEL as the maximum normally acceptable for residential and noise sensitive uses.
- City and County ordinances limit the height of objects underlying the Airport's FAR Part 77 surfaces.

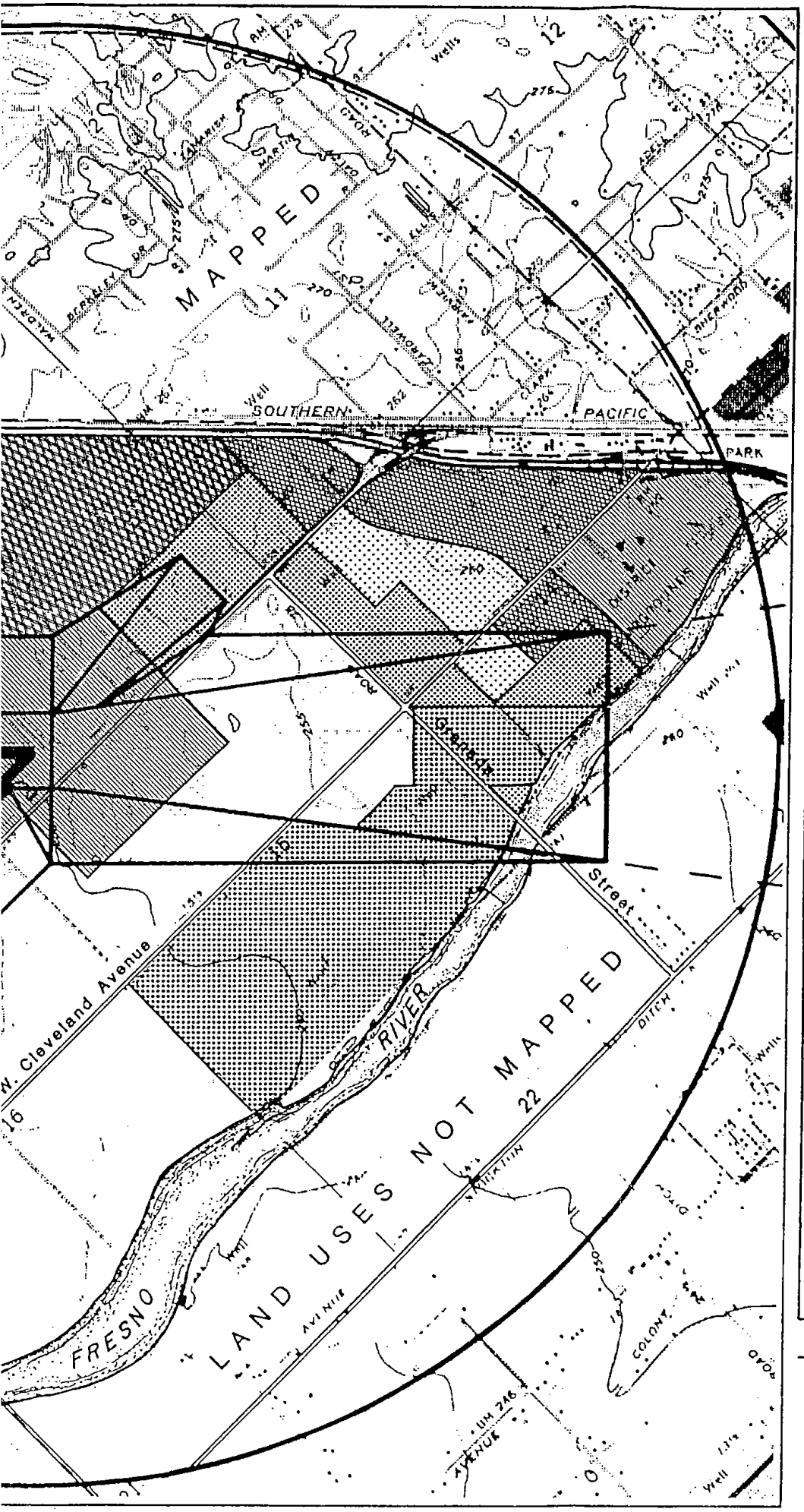


Figure 4F

Existing Land Use Designations

Madera Municipal Airport

Table 4F

Noise Model Input Data

Madera Municipal Airport

AIRCRAFT MIX
(Estimated 1989 Activity Level)

Aircraft Type	Total Operations		
	Annual	Average Day	Percentage
Single-Engine, Propeller	55,700	152.60	85.70
Ag Aircraft	3,000	8.22	4.61
Light Twin-Engine, Piston (e.g. Beech Baron)	4,340	11.89	6.68
Light Twin-engine, Turboprop (e.g. Cessna Conquest)	1,860	5.10	2.86
Small Business Jet	100	0.27	0.15
Total	65,000	178.08	100

AIRCRAFT MIX
(Projected 2010 Activity Level)

Aircraft Type	Total Operations		
	Annual	Average Day	Percentage
Single-Engine, Propeller	81,838	224.21	81.83
Ag Aircraft	3,000	8.22	3.0
Light Twin-Engine, Piston (e.g. Beech Baron)	8,832	32.42	8.83
Light Twin-engine, Turboprop (e.g. Cessna Conquest)	3,944	10.81	3.94
Medium Twin-engine, Turboprop (e.g. Saab 340)	493	1.35	.50
Small Business Jet (Cessna Citation)	493	1.35	.50
Medium Business Jet (e.g. Lear 35)	1,400	3.84	1.40
Total	100,000	282.20	100

TIME OF DAY
(Estimated 1989 and Projected 2010)

Aircraft Type	Type of Operation	Percentage of Operations by Aircraft Type		
		Day 7:00 a.m. 7:00 p.m.	Evening 7:00 p.m. 10:00 p.m.	Night 10:00 p.m. 7:00 a.m.
Single-Engine, Propeller	Ldg & T/O Touch&Go	89	8	3
Ag Aircraft	Ldg & T/O	60	0	40
Light Twin-Engine, Piston	Ldg & T/O	85	10	5
Light Twin-Engine, Turboprop	Ldg & T/O	85	10	5
Medium Twin-Engine, Turboprop	Ldg & T/O	100	0	0
Small Business Jet	Ldg & T/O	89	10	1
Medium Business Jet	Ldg & T/O	0	0	100

Table 4F

Noise Model Input Data

Madera Municipal Airport

RUNWAY UTILIZATION
(Estimated 1989 and Projected 2010)

Aircraft Type	Time	Percentage of Landings				Percentage of Takeoffs			
		Rwy 12	Rwy 30	Rwy 7	Rwy 25	Rwy 12	Rwy 30	Rwy 7	Rwy 25
Single-Engine, Propeller	All	12	88	0	0	12	88	0	0
Ag Aircraft	All	0	0	98	2	0	0	98	2
Light Twin-Engine, Piston	All	12	88	0	0	12	88	0	0
Light Twin-Engine, Turboprop	All	12	88	0	0	12	88	0	0
Medium Twin-Engine, Turboprop	All	12	88	0	0	12	88	0	0
Small Business Jet	All	12	88	0	0	12	88	0	0
Medium Business Jet	All	12	88	0	0	12	88	0	0

FLIGHT TRACKS - LANDINGS
(Estimated 1989 and Projected 2010)

Aircraft Type	Runway 12		Runway 30		Rwy 7	Rwy 25
	Track SL1	Track SL2	Track NL1	Track NL2	Track EL1	Track WL1
Single-Engine, Propeller	50	50	50	50	0	0
Ag Aircraft	100	0	100	0	100	100
Light Twin-Engine, Piston	100	0	100	0	0	0
Light Twin-Engine, Turboprop	100	0	100	0	0	0
Medium Twin-engine, Turboprop	100	0	100	0	0	0
Small Business Jet	100	0	100	0	0	0
Medium Business Jet	100	0	100	0	0	0

FLIGHT TRACKS - TAKEOFFS
(Estimated 1989 and Projected 2010)

Aircraft Type	Rwy 12	Runway 30		Rwy 7	Rwy 25		
	Track S1	Track N1	Track N2	Track E4	Track W1	Track W2	Track W3
Single-Engine, Propeller	100	57	43	0	0	0	0
Ag Aircraft	0	0	0	100	33	33	33
Light Twin-Engine, Piston	100	57	43	0	0	0	0
Light Twin-Engine, Turboprop	100	100	0	0	0	0	0
Medium Twin-engine, Turboprop	100	100	0	0	0	0	0
Small Business Jet	100	100	0	0	0	0	0
Medium Business Jet	100	100	0	0	0	0	0

FLIGHT TRACKS - TOUCH & GOES
(Estimated 1989 and Projected 2010)

Aircraft Type	Rwy 30
	Track TG1
Single-Engine, Propeller	50

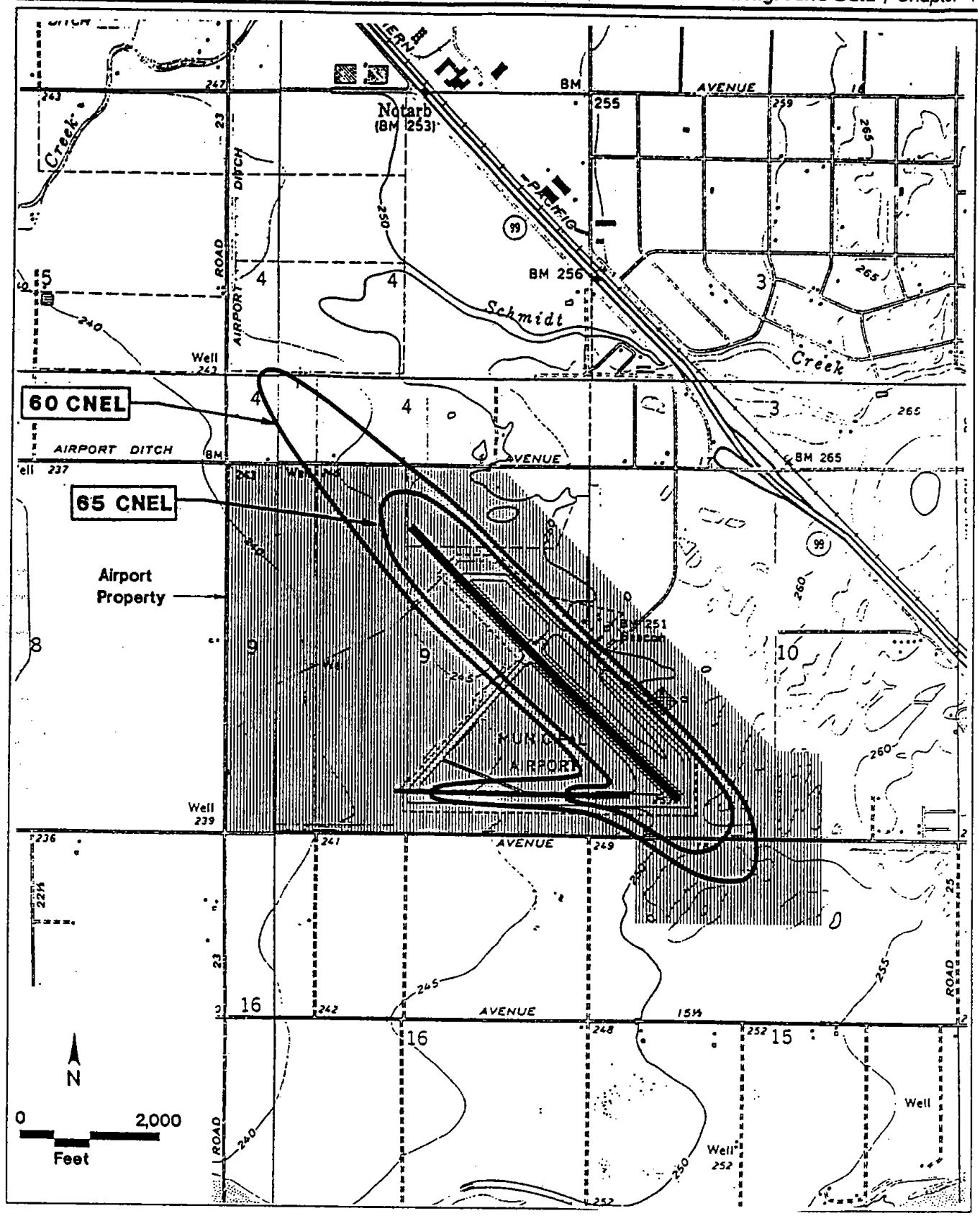


Figure 4G

Noise Contours - 2010

Madera Municipal Airport

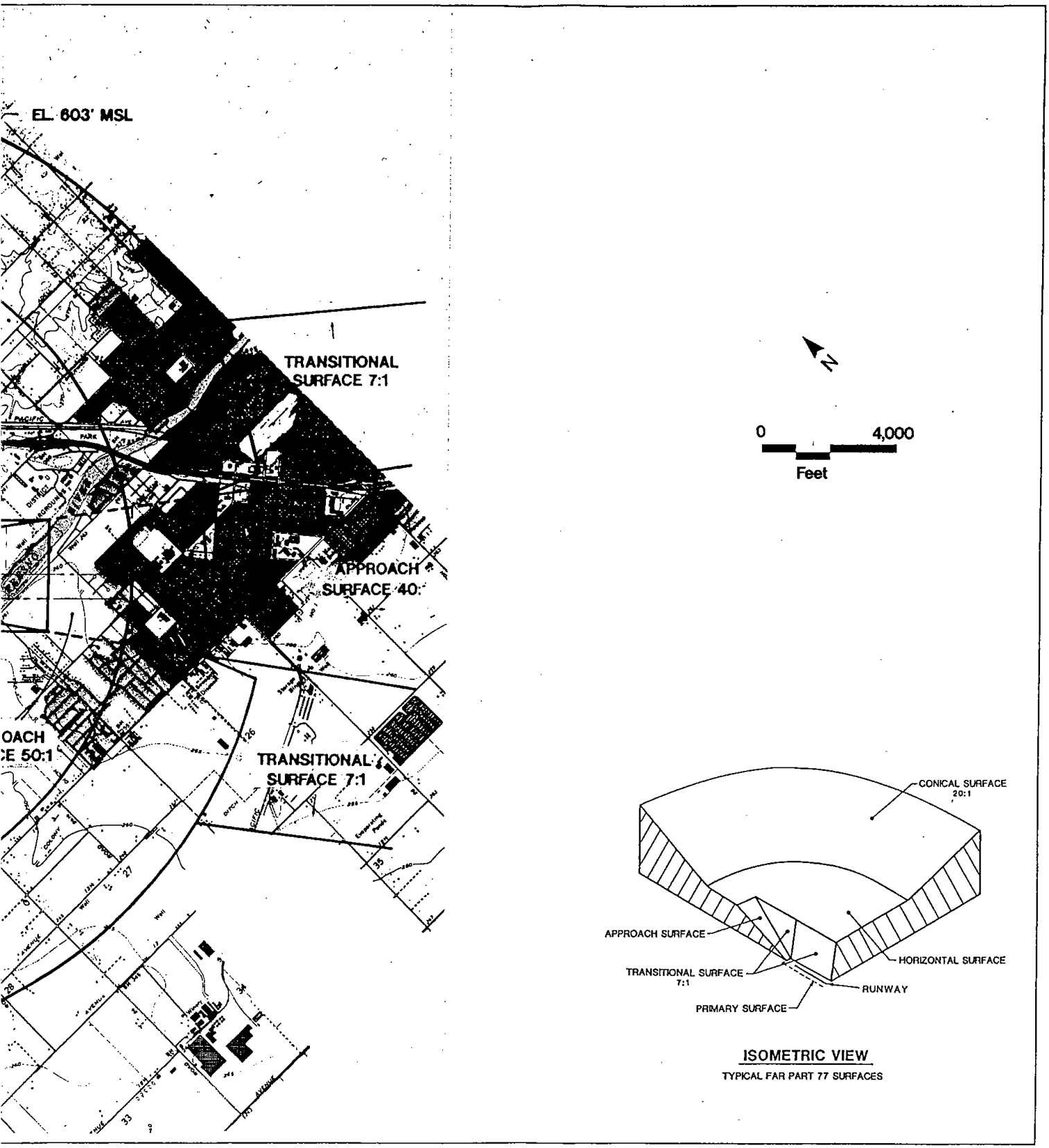


Figure 4H

Airspace Plan

Madera Municipal Airport

5

Implementation Strategies for Local Jurisdictions

INTRODUCTION

The Airport Land Use Commission policies set forth in this *Airport Land Use Compatibility Plan* contain performance-type standards intended to prevent occurrence of future new conflicts between airport operations and surrounding land uses. Implementation of these criteria requires action by the local jurisdictions that have control over the airport-vicinity land use. This process is comparable to that established by the California Environmental Quality Act – the state has adopted a set of guidelines that must then be implemented by the specific procedures and other actions adopted by each local government.

The following strategies are divided into two categories: (1) those that can or must be taken by the local land use jurisdictions; and (2) actions that are available to a local jurisdiction when it is also the owner of the airport creating the impacts.

LOCAL JURISDICTION ACTIONS

Land Use Designations

The most fundamental means of assuring compatibility between an airport and surrounding land uses is by the designation of appropriate land uses in local general plans, specific plans, and zoning ordinances. California state aeronautics law requires local jurisdictions to make their general plans and specific plans consistent with the county airport land use commission plan or otherwise to override the commission.

Although long-term maintenance of airport/land use compatibility is difficult and often impossible without designation of compatible land uses, this form of land use control also has significant limitations. To overcome these limitations, other forms of land use controls are normally essential as part of a complete airport/land use compatibility implementation strategy.

- **Ease of Change** – Nothing permanently locks in a land use designation. When pressured by landowners to allow less restricted development, future local legislative bodies can change the established designations – by overriding the ALUC, if necessary. Such changes especially can occur if the land changes jurisdiction (e.g., as a result of annexation).

- **Restrictiveness** – Land use designations are limited in the degree of restrictiveness that they can contain. If they are deemed to eliminate all reasonable economic use of private property, they can be considered an unfair taking and result in inverse condemnation. (For additional discussion of inverse condemnation, see Chapter 7). Especially in areas near ends of runways, the restrictions may need to be more severe than can be accomplished by this means alone.

- **Lack of Retroactiveness** – Designating an area for a different use than the one already existing may encourage change over the long run, but it does not directly eliminate existing incompatible uses. Other devices, such as fee simple acquisition, may be necessary to bring about the changes.

- **Nonaviation Orientation** – Standard land use plan and zoning designations are developed for community-wide planning purposes. Seldom do they have an aviation orientation or address the specific issues of compatibility with aviation activities (i.e., noise and safety).

Airport Combining Zones

One way of overcoming the lack of aviation orientation of basic land use designations is adoption of an overlay or combining zone. A combining zone supplements local land use designations by adding specific noise and, often more importantly, safety criteria (e.g., maximum number of people on the site, site design and open space criteria, height restrictions, etc.) applicable to future development in the airport vicinity. Geographically, the combining zone should extend at least a mile from the runway ends and encompass lands regularly overflown by aircraft at or below traffic pattern altitudes.

An airport combining zone has several important benefits. Most importantly, it permits the continued utilization of the majority of the design and use guidelines contained in the existing zones. At the same time, it provides a mechanism for implementation of restrictions and conditions that may apply to only a few types of land uses within a given land use category or zoning district. This avoids the need for a large number of discrete zoning districts. It also enables local jurisdictions to use the performance standards provided in the *Airport Land Use Compatibility Plan* directly, rather than through redefinition of existing zoning district descriptions.

Combining Zone Components

Requirements defined in a combining zone ordinance could include:

- **Noise Insulation Standards** – In highly noise-impacted areas, the ordinance could be used to assure compliance with state statutes regarding interior noise levels. The ordinance could specify the construction techniques necessary to meet the requirements.

- **Height Limitations** – Restrictions on the height of buildings, antennas, trees, and other objects near airports, as defined by Federal Aviation Regulations (FAR) Part 77, Subpart C, and regulated by California aeronautics law, can be implemented as part of a combining zone. Although Part 77 surfaces are complex, three-dimensional shapes even at airports with only one runway, the general flatness of the land around airports in Imperial County limits the significance. Except within Compatibility Zone A, and to a minor extent Zone B, only objects exceeding 35 feet in height would have a potential to penetrate the Part 77 surfaces.

- **FAA Notification Requirements** – Combining zones also can be used to assure that project developers are informed about the need for compliance with the notification requirements of FAR Part 77. Subpart B of the regulations require that the proponent of any project which exceeds a specified set of height criteria submit a "Notice of Proposed Construction or Alteration" (Form 7460-1) to the Federal Aviation Administration prior to commencement of construction. The height criteria associated with this notification requirement are lower than those spelled out in Part 77, Subpart C, which define airspace obstructions. The purpose of the notification is to determine if the proposed construction would constitute a potential hazard or obstruction to flight. Notification is not required for proposed structures that would be shielded by existing structures or by natural terrain of equal or greater height, where it is obvious that the proposal would not adversely affect air safety.

- **Maximum Densities** – The principal noise and safety compatibility standards in the *Airport Land Use Compatibility Plan* are expressed in terms of dwelling units per acre for residential uses and people per acre for other land uses. These standards can either be included as is in a compatibility zone or used to modify the underlying land use designations. For residential land uses, the correlation between the compatibility criteria and land use designations is direct. For other land uses, the implications of the density limitations are not as clear. One step that can be taken by local governments is establish a matrix indicating whether specific types of land uses are or are not compatible with each of the four compatibility zones. To be useful, the land use categories will need to be more detailed than typically provided by general plan or zoning ordinance land use designations. Appendix D herein provides a sample compatibility matrix for over 70 types of land uses.

- **Open Space Requirements** – *Airport Land Use Compatibility Plan* criteria regarding airport-vicinity open space suitable for emergency aircraft landings can be implemented by a combining zone. These criteria are most effectively carried out by planning at the general or specific plan level, but may also need to be addressed in terms of the development restrictions on large parcels.

Avigation Easements

Avigation easements are another type of land use control measure available to local jurisdictions. These easements have historically been used to establish height limitations, prevent other flight hazards, and permit noise impacts. More recently, they have been employed as a form of buyer awareness — the recording of an easement with the title to a property ensures that prospective buyers of the property are informed about the airport impacts.

Methods of Acquisition

As with all easements, an avigation easement applies only to the specific property to which it is attached and it is binding on all subsequent owners of the property. Avigation easements can be obtained either by purchase or by required dedication.

- **Purchase** — Acquisition of avigation easements for some monetary amount is usually done by the airport proprietor, which may or may not be the same as the local land use jurisdiction. In most instances, the purchase of avigation easements is limited to property within runway protection zones (previously called clear zones) or elsewhere very close to the airport boundaries where some significant degree of restriction or impact is involved.

- **Dedication** — Required dedication of avigation easements is sometimes set as a condition for local jurisdiction approval of a proposed land use development, especially a residential development, in the vicinity of an airport. Generally, when avigation easements are obtained in this manner, they are primarily intended to serve as a comprehensive and stringent form of buyer awareness measure — the rights conveyed by the easement dedication are seldom more restrictive than the conditions and rights established in other legal forms (e.g., airport-vicinity height-limit zoning ordinances, Federal Aviation Regulations, etc.).

Property Rights Conveyed

A standard avigation easement conveys the following property rights from the owner of the property to the holder of the easement:

- **Overflight** — A right-of-way for free and unobstructed passage of aircraft through the airspace over the property at any altitude above a surface specified in the easement (set in accordance with Federal Aviation Regulations Part 77 and/or criteria for terminal instrument approaches).

- **Impacts** — A right to subject the property to noise, vibration, fumes, dust, and fuel particle emissions associated with normal airport activity.

- **Height Limits** — A right to prohibit the construction or growth of any structure, tree, or other object that would enter the acquired airspace.

- **Access and Abatement** – A right-of-entry onto the property, with appropriate advance notice, for the purpose of removing, marking, or lighting any structure or other object that enters the acquired airspace.

- **Other Restrictions** – A right to prohibit electrical interference, glare, misleading light sources, visual impairments, and other hazards to aircraft from being created on the property.

Easements which convey only certain ones of these rights are common. An easement containing only the first two rights is usually referred to as an *overflight* or *noise* easement. The latter three rights are often collectively called a *height-limit* or *airspace* easement. Overflight easements are useful in locations sufficiently distant from an airport that height limits and other restrictions are not a concern. Height-limit easements have most frequently been obtained by purchase on properties close to an airport where restrictions on the height of objects are necessary. Because height-limit easements do not include the overflight easement rights, there is little apparent advantage to obtaining them rather than a complete avigation easement.

Buyer Awareness Measures

Buyer awareness is an umbrella category for types of airport/land use compatibility measures whose objective is to ensure that prospective buyers of property in the vicinity of an airport are made aware of the airport's existence and the impacts that the airport activity has on surrounding land uses. Avigation easements are the most definitive form of buyer awareness measure. Buyer awareness, though, can also be successfully implemented through other types of programs. Two primary methods are deed notices and real estate disclosure statements.

Deed Notices

Deed notices are statements, attached to the deed to a property, disclosing that the property is subject to routine overflights and associated noise and other impacts by aircraft operating at a nearby airport. An ideal application of deed notices is as a condition of approval for development of residential land uses in airport-vicinity locations where neither noise nor safety are significant factors, but frequent aircraft overflights may be annoying to some people. In addition to being recorded with the deed to a property, the notices should be included on parcel maps and any tentative or final subdivision map.

Deed notices are similar to avigation or other aviation-related easements in that they become part of the title to a property and thus are a permanent form of buyer awareness. The distinguishing difference between deed notices and avigation easements is that deed notices only serve as a disclosure of potential overflights, whereas avigation easements convey an identified set of property rights. In locations where height limitations or other land use restrictions are unnecessary, deed notices have the advantage of being less cumbersome to define. Also, they give less appearance of having an negative affect on the value of the property.

A example of a deed notice is included in Appendix E.

Real Estate Disclosure Statements

A more comprehensive form of buyer awareness program is to require that information about an airport's influence area be disclosed to prospective buyers of all airport-vicinity properties prior to the transfer of title. The advantage of this type of program is that it applies to previously existing land uses as well as to new development.

This type of buyer awareness program can be implemented through adoption of a local ordinance requiring real estate disclosure upon the transfer of title or it can be established in conjunction with the adoption of an airport combining zone. Notification describing the zone and discussing its significance could be formally sent to all local real estate brokers and title companies. Having received this information, the brokers would be obligated by state law to pass it along to prospective buyers.

At a minimum, the area covered by a real estate disclosure program should include the airport influence area as established in the *Airport Land Use Compatibility Plan*. The boundary also could be defined to coincide with the boundaries of an airport combining zone.

AIRPORT PROPRIETOR ACTIONS

By law, an airport land use commission cannot establish policies governing the operation of any airport. Nonetheless, in developing its policies, the commission must take into account adopted airport master plans and thus, by extension, should consider actions taken by the airport proprietor to limit the airport's impacts. When a local land use jurisdiction is also the owner of the airport creating the impacts, the jurisdiction gains significant additional capabilities with regard to assuring airport/land use compatibility. Sometimes, the jurisdiction can use airport/land use compatibility actions such as those described below in addition to or in lieu of restrictions on land use development.

Acquisition of Fee Simple Title

Outright airport-owner purchase of fee simple title to a property is the most direct means of land use control. It provides positive assurance of long-term land use compatibility and is the only type of action that enables existing incompatible uses to be removed.

Federal Aviation Administration Funding

Acquisition of property for approach protection purposes is eligible for federal grants under the Federal Aviation Administration Airport Improvement Program. FAA guidelines state that:

> "...land interest is eligible which is necessary to restrict the use of land in the approach and the transitional zones (the dimensions as cited in the applicable Advisory Circulars) to activities

and purposes compatible with normal airport operations as well as to meet current and anticipated development at the airport." (FAA Order 5100.38A)

Airport sponsors are encouraged "to acquire the minimum property interest necessary to ensure safe aeronautical use." Except when required for noise compatibility, normally only the portion of approach zone property within 5,000 feet of the runway end is grant eligible.

Limitations

Weighing against the benefits of fee simple acquisition are several important drawbacks:

- **Cost** – Fee simple acquisition is usually the most expensive land use compatibility measure. Also, although some 90% of acquisition costs are eligible for FAA grants under current legislation, the FAA participates in acquisition of parcels only within the limited area indicated above. Most airport operators cannot afford to purchase property without assistance from the FAA.

- **Disruptiveness** – The need to relocate residents and businesses occupying the property to be acquired is disruptive both to the individuals directly involved and to the neighborhood as a whole. Compliance with state and federal relocation laws is required (assistance in finding replacement property must be provided and moving costs must be paid).

- **Tax Implications** – Government acquisition of real property removes it from the tax rolls unless it is leased out for compatible development.

- **Owner Opposition** – Landowners may be unwilling to sell their property voluntarily. Although the property can still be acquired by eminent domain, the condemnation process can be time consuming and costly (both financially and socially).

Acquisition of Approach Protection Easements

As with easements in general, approach protection easements are a form of less-than-fee interest in real property. The key distinction between approach protection easements and the standard avigation easements discussed earlier is that approach protection easements establish specific controls on the underlying use of the land; avigation easements do not. Certain development rights that normally are associated with land ownership would be acquired (e.g., rights to develop high-density residential facilities). The landowner would have all other rights associated with land ownership including the right to sell the property. The easement would, however, be attached to the property title and therefore be binding on subsequent owners. In concept, approach protection easements are very similar to conservation easements which have been employed in several states as a means of agricultural land preservation.

There are two means by which approach protection easements can be acquired. One is through direct purchase. This method is suitable where the existing land uses are compatible with airport

activities, but where prevention of future incompatible uses is of such importance that other, less absolute control measures (e.g., zoning) are deemed inadequate. The second method is by retention of the easement when reselling property previously acquired in fee. This approach is necessary when the existing land uses are not compatible with airport activities. In either case, several specific issues must be addressed in the acquisition process:

- **Lack of Precedence** – A difficulty associated with use of approach protection easements as an airport/land use compatibility measure is that there is little previous experience with them. More experience exists with the conservation easements employed as a means of agricultural land preservation, but these most often are obtained through donation rather than purchase. Several airports, however, are currently in the process of obtaining approach protection easements. Their experience will be invaluable elsewhere.

- **Determining Cost of Acquisition** – One of the problems with acquisition of approach protection easements is determining their fair cost, especially when they are purchased directly. In theory, the cost of an approach protection easement should be the difference between a property's market value without the easement and its remaining value with the easement restrictions attached. The market values would be based upon the concept of "highest and best use" and would be determined by appraisal. The problem that arises, however, is the lack of comparable transactions upon which to base appraisals of the easement-restricted property. Some negotiation undoubtedly would come into play regarding what uses reasonably could still occur on the property and what the property's "fair" value for such purposes should be.

- **Maximum Acceptable Cost** – If the cost of acquiring an approach protection easement is determined to represent a significant percentage of the fee simple value (30-50% as a maximum), it becomes preferable to purchase the property in fee and resell it with the easement attached. The value of the easement would be easier to determine under such circumstances. Although appraisals would still need to be obtained, the actual sale price of the property would be established by the open market.

- **Description of Restrictions** – An approach protection easement is a negative easement in that it restricts the underlying rights to use of the land. However, the easement agreement can be written either to prohibit specified uses or to permit only those uses listed. The latter is more certain to prevent development of incompatible uses, although it may also eliminate unanticipated uses that would be compatible. Regardless of the approach, the agreement must be carefully worded to prevent future disputes.

- **Transfer of Development Rights** – An extension of the approach protection easement concept is to allow the development rights acquired and removed from one parcel to be sold or transferred to another parcel where development would be acceptable. The latter parcel would then be allowed to be developed to a higher degree than would otherwise be permitted by the underlying zoning. Implementation of development rights transfer would require approval by the local jurisdiction and coordination with other community land use planning criteria.

Airport Operational Restrictions and Facility Modifications

All of the airport/land use compatibility implementation strategies discussed previously in this chapter involve some form of control on land use. The other approach to minimizing compatibility conflicts is to reduce the impacts created by aircraft operating at an airport. This can be done by adoption of restrictions on the way aircraft are permitted to operate at the airport and/or by construction of physical facilities to mitigate operational impacts.

At most airports where operational restrictions or facility modifications have been implemented, the objective has been to reduce the airport's noise impacts. Enhancement of safety can, however, also be an important goal. The following list represents only a few of the numerous actions that can be beneficial at general aviation airports. The choice of which ones to implement depends upon the nature and extent of the impacts and the characteristics of the land uses being affected.

- **Preferential Runway** – When winds are blowing at more than about 5 knots, the wind direction dictates which runway is used at an airport. During calm or near calm conditions any runway can be used. The purpose of a preferential runway policy is to establish which runway should be used under these circumstances. Since aircraft takeoffs typically create more noise than do landings, overall noise impacts can sometimes be reduced by directing these operations over lands whose uses are the least affected by noise.

- **Traffic Pattern Location and Altitudes** – As described in Chapter 5, standard left-hand traffic pattern turns result in a pattern on each side of a runway. Often, high terrain or airspace conflicts necessitate limitation of the pattern to a single side of the runway. The length or width of the pattern sometimes is limited for similar reasons. Such restrictions also can be established for noise abatement purposes – for example, to place the pattern over open land and avoid overflight of urban areas. Increasing the altitude of the traffic pattern is another change that can have noise reduction benefits. Implementation of these actions, it must be noted, requires coordination with the Federal Aviation Administration.

- **Single-Event Noise Level Limits** – Overall airport noise levels can potentially be reduced by restricting or prohibiting operation of the noisiest aircraft. This technique is most effective when a few specific types of aircraft are far noisier than others operating at the airport. Maximum noise level criteria can be based upon published data, such as Federal Aviation Regulations Part 36, or, at severely impacted airports, upon actual monitoring of individual events.

- **Aircraft Weight Limit** – Most airports have an operational weight limit set to reflect the pavement strength or other physical limitations of the airport. Aircraft weight limit restrictions also can be established as a means of reducing the potential severity of off-airport accidents. Additionally, because heavier aircraft tend to be louder than lighter ones, an aircraft weight limit can serve as a form of single-even noise level limit.

- **Nighttime Restrictions** – Any of the above restrictions can be fixed to be more stringent during nighttime hours than during the daytime. The concept is that airport impacts, particularly from noise, are more disturbing during the night than in the daytime.

- **Run-up Locations** – Normal practice is for aircraft to conduct run-ups at a designated location adjacent to the point they taxi onto the runway. If such a location produces excessive noise impacts upon adjacent property, it is often reasonable to move the run-up area to another convenient spot. Alternatively, a sound barrier (such as an earthen berm) can sometimes be constructed between the run-up area and the impacted land uses.

- **Other Facility Modifications** – At some airports, other physical changes to the runway configuration can hold prospects for reducing noise and/or safety impacts. Such facility modifications might include displacing or relocating a runway landing threshold or construction of a new runway to take traffic off a runway that produces more significant impacts.

Part III

Appendices

State Laws Related to Airport Land Use Planning

AERONAUTICS LAW
STATE AERONAUTICS ACT

Public Utilities Code
Chapter 4, Article 3.5

AIRPORT LAND USE COMMISSION

(As of July 1993)

21670. Creation; Membership; Selection

(a) The Legislature hereby finds and declares that:

(1) It is in the public interest to provide for the orderly development of each public use airport in this state and the area surrounding these airports so as to promote the overall goals and objectives of the California airport noise standards adopted pursuant to Section 21669 and to prevent the creation of new noise and safety problems.

(2) It is the purpose of this article to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses.

(b) In order to achieve the purposes of this article, every county in which there is located an airport which is served by a scheduled airline may establish an airport land use commission. Every county, in which there is located an airport which is not served by a scheduled airline, but is operated for the benefit of the general public, may establish an airport land use commission, except that the board of supervisors for the county may, after consultation with the appropriate airport operators and affected local entities and after a public hearing, adopt a resolution finding that there are no noise, public safety, or land use issues affecting any airport in the county which require the creation of a commission and declaring the county exempt from that requirement. The board may, in this event, transmit a copy of the resolution to the Director of Transportation. For purposes of this section, "commission" means an airport land use commission. Each commission shall consist of seven members to be selected as follows:

(1) Two representing the cities in the county, appointed by a city selection committee comprised of the mayors of all the cities within that county, except that if there are any cities contiguous or adjacent to the qualifying airport, at least one representative shall be appointed therefrom. If there are no cities within a county, the number of

representatives provided for by subdivisions (2) and (3) shall each be increased by one.

(2) Two representing the county, appointed by the board of supervisors.

(3) Two having expertise in aviation, appointed by a selection committee comprised of the managers of all the public airports within that county.

(4) One representing the general public, appointed by the other six members of the commission.

(c) Public officers, whether elected or appointed, may be appointed and serve as members of the commission during their terms of public office.

(d) Each member shall promptly appoint a single proxy to represent the member in commission affairs and to vote on all matters when the member is not in attendance. The proxy shall be designated in a signed written instrument which shall be kept on file at the commission offices, and the proxy shall serve at the pleasure of the appointing member. A vacancy in the office of proxy shall be filled promptly by appointment of a new proxy.

(e) A person having an "expertise in aviation" means a person who, by way of education, training, business, experience, vocation, or avocation has acquired and possesses particular knowledge of, and familiarity with, the function, operation, and role of airports, or is an elected official of a local agency which owns or operates an airport. The commission shall be constituted pursuant to this section on and after March 1, 1988.

21670.1. Action by Designated Body Instead of Commission

(a) Notwithstanding any provisions of this article, if the board of supervisors and the city selection committee of mayors in any county each makes a determination by a majority vote that proper land use planning can be accomplished through the actions of an appropriate designated body, then such body shall assume the planning responsibilities of an airport land use commission as provided for in this article, and a commission need not be formed in that county.

(b) A body designated pursuant to subdivision (a) which does not include among its membership at least two members having an expertise in aviation, as defined in subdivision (e) of Section 21670, shall, when acting in the capacity of an airport land use commission, be augmented so that the body, as augmented, will have at least two members having that expertise. The commission shall be constituted pursuant to this section on and after March 1, 1988.

21670.2. Applicability to Counties Having over 4 Million Population

(a) Sections 21670 and 21670.1 do not apply to the County of Los Angeles. In that county, the county regional planning commission has the responsibility for coordinating the airport planning of public agencies within the county. In instances where impasses result relative to this planning, an appeal may be made to the county regional planning commission by any public agency involved. The action taken by the county regional planning commission on such an appeal may be overruled by a four-fifths vote of the governing body of a public agency whose planning led to the appeal.

(b) By January 1, 1992, the county regional planning commission shall adopt the comprehensive land use plans required pursuant to Section 21675.

(c) Sections 21675.1, 21675.2, and 21679.5 do not apply to the County of Los Angeles until January 1, 1992. If the comprehensive land use plans required pursuant to Section 21675 are not adopted by the county regional planning commission by January 1, 1992, Sections 21675.1 and 21675.2 shall apply to the County of Los Angeles until the plans are adopted.

21671. Airports Owned by a City, District, or County; Appointment of Certain Members by Cities and Counties

In any county where there is an airport operated for the general public which is owned by a city or district in another county or by another county, one of the representatives provided by paragraph (1) of subdivision (b) of Section 21670 shall be appointed by the city selection committee of mayors of the cities of the county in which the owner of that airport is located, and one of the representatives provided by paragraph (2) subdivision (b) of Section 21670 shall be appointed by the board of supervisors of the county in which the owner of that airport is located.

21671.5. Term of Office; Removal of Members; Vacancies; Compensation; Staff Assistance; Meetings

(a) Except for the terms of office of the members of the first commission, the term of office for each member shall be four years and until the appointment and qualification of his or her successor. The members of the first commission shall classify themselves by lot so that the term of office of one member is one year, of two members is two years, of two members is three years, and of two members if four years. The body which originally appointed a member whose term has expired shall appoint his or her successor for a full term of four years. Any member may be removed at any time and without cause by the body appointing him or her. The expiration date of the term of office of each member shall be the first Monday in May in the year in which his or her term is to expire. Any vacancy in the membership of the commission shall be filled for the unexpired term by appointment by the body which originally appointed the member whose office has become vacant. The chairperson of the commission shall be selected by the members thereof.

(b) Compensation, if any, shall be determined by the board of supervisors.

(c) Staff assistance, including the mailing of notices and the keeping of minutes, and necessary quarters, equipment, and supplies shall be provided by the county. The usual and necessary expenses of the commission shall be a county charge.

(d) Notwithstanding any other provisions of this article, the commission shall not employ any personnel either as employees or independent contractors without the prior approval of the board of supervisors.

(e) The commission shall meet at the call of the commission chairperson or at the request of the majority of the commission members. A majority of the commission members shall constitute a quorum for the transaction of business. No action shall be taken by the commission except by the recorded vote of a majority of the full membership.

(f) The commission may establish a schedule of fees necessary to comply with this article. Those fees shall be charged to the proponents of actions, regulations, or permits, shall not exceed the estimated reasonable cost of providing the service, and shall be imposed pursuant to Section 66016 of the Government Code. Except as provided in subdivision (g), after June 30, 1991, a commission which has not adopted the comprehensive land use plan required by Section 21675 shall not charge fees pursuant to this subdivision until the commission adopts the plan.

(g) In any county which has undertaken by contract or otherwise completed land use plans for at least one-half of all public use airports in the county, the commission may continue to charge fees necessary to comply with this article until June 30, 1992, and, if the land use plans are complete by that date, may continue charging fees after June 30, 1992. If the land use plans are not complete by June 30, 1992, the commission shall not charge fees pursuant to subdivision (f) until the commission adopts the land use plans.

21672. Rules and Regulations

Each commission shall adopt rules and regulations with respect to the temporary disqualification of its members from participating in the review or adoption of a proposal because of conflict of interest and with respect to appointment of substitute members in such cases.

21673. Initiation of Proceedings for Creation by Owner of Airport

In any county not having a commission or a body designated to carry out the responsibilities of a commission, any owner of a public airport may initiate proceedings for the creation of a commission by presenting a request to the board of supervisors that a commission be created and showing the need therefor to the satisfaction of the board of supervisors.

21674. Powers and Duties

The commission has the following powers and duties, subject to the limitations upon its jurisdiction set forth in Section 21676:

(a) To assist local agencies in ensuring compatible land uses in the vicinity of all new airports and in the vicinity of existing airports to the extent that the land in the vicinity of those airports is not already devoted to incompatible uses.

(b) To coordinate planning at the state, regional, and local levels so as to provide for the orderly development of air transportation, while at the same time protecting the public health, safety, and welfare.

(c) To prepare and adopt an airport land use plan pursuant to Section 21675.

(d) To review the plans, regulations, and other actions of local agencies and airport operators pursuant to Section 21676.

(e) The powers of the commission shall in no way be construed to give the commission jurisdiction over the operation of any airport.

(f) In order to carry out its responsibilities, the commission may adopt rules and regulations consistent with this article.

21674.5. Training of Airport Land Use Commission's Staff

(a) The Department of Transportation shall develop and implement a program or programs to assist in the training and development of the staff of airport land use commissions, after consulting with airport land use commissions, cities, counties, and other appropriate public entities.

(b) The training and development program or programs are intended to assist the staff of airport land use commissions in addressing high priority needs, and may include, but need not be limited to, the following:

(1) The establishment of a process for the development and adoption of comprehensive land use plans.

(2) The development of criteria for determining airport land use planning boundaries.

(3) The identification of essential elements which should be included in the comprehensive plans.

(4) Appropriate criteria and procedures for reviewing proposed developments and determining whether proposed developments are compatible with the airport use.

(5) Any other organizational, operational, procedural, or technical responsibilities and functions which the department determines to be appropriate to provide the commission staff and for which it determines there is a need for staff training and development.

(c) The department may provide training and development programs for airport land commission staff pursuant to this section by any means it deems appropriate. Those programs may be presented in any of the following ways:

(1) By offering formal courses or training programs.

(2) By sponsoring or assisting in the organization and sponsorship of conferences, seminars, or other similar events.

(3) By producing and making available written information.

(4) Any other feasible method of providing information and assisting in the training and development of airport land use commission staff.

21675. Land Use Plan

(a) Each commission shall formulate a comprehensive land use plan that will provide for the orderly growth of each public airport and the area surrounding the airport within the jurisdiction of the commission, and will safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general. The commission plan shall include and shall be based on a long-range master plan or an airport layout plan, as determined by the Division of Aeronautics of the Department of Transportation, that reflects the anticipated growth of the airport during at least the next 20 years. In formulating a land use plan, the commission may develop height restrictions on buildings, specify use of land, and determine building standards, including soundproofing adjacent to airports, within the planning area. The comprehensive land use plan shall be reviewed as often as necessary in order to accomplish its purposes, but shall not be amended more than once in any calendar year.

(b) The commission may include, within its plan formulated pursuant to subdivision (a), the area within the jurisdiction of the commission surrounding any federal military airport for all the purpose specified in subdivision (a). This subdivision does not give the commission any jurisdiction or authority over the territory or operations of any military airport.

(c) The planning boundaries shall be established by the commission after hearing and consultation with the involved agencies.

(d) The commission shall submit to the Division of Aeronautics of the department one copy of the plan and each amendment to the plan.

(e) If a comprehensive land use plan does not include the matters required to be included pursuant to this article, the Division of Aeronautics of the department shall notify the commission responsible for the plan.

21675.1. Adoption of Land Use Plan

(a) By June 30, 1991, each commission shall adopt the comprehensive land use plan required pursuant to Section 21675, except that any county which has undertaken by contract or otherwise completed land use plans for at least one-half of all public use airports in the county, shall adopt that plan on or before June 30, 1992.

(b) Until a commission adopts a comprehensive land use plan, a city or county shall first submit all actions, regulations, and permits within the vicinity of a public airport to the commission for review and approval. Before the commission approves or disapproves any actions, regulations, or permits, the commission shall give the public notice in the same manner as the city or county is required to give for those actions, regulations, or permits. As used in this section, "vicinity" means land which will be included or reasonably could be included within the plan. If the commission has not designated a study area for the plan, then "vicinity" means land within two miles of the boundary of a public airport.

(c) The commission may approve an action, regulation, or permit if it finds, based on substantial evidence in the record, all of the following:

(1) The commission is making substantial progress toward the completion of the plan.

(2) There is a reasonable probability that the action, regulation, or permit will be consistent with the plan being prepared by the commission.

(3) There is little or no probability of substantial detriment to or interference with the future adopted plan if the action, regulation, or permit is ultimately inconsistent with the plan.

(d) If the commission disapproves an action, regulation, or permit, the commission shall notify the city or county. The city or county may overrule the commission, by a two-thirds vote of its governing body, if it makes specific findings that the proposed action, regulation, or permit is consistent with the purposes of this article, as stated in Section 21670.

(e) If a city or county overrules the commission pursuant to subdivision (d), that action shall not relieve the city or county from further compliance with this article after the commission adopts the plan.

(f) If a city or county overrules the commission pursuant to subdivision (d) with respect to a publicly owned airport that the city or county does not operate, the operator of the airport shall be immune from liability for damages to property or personal injury from the city's or county's decision to proceed with the action, regulation, or permit.

(g) A commission may adopt rules and regulations which exempt any ministerial permit for single-family dwellings from the requirements of subdivision (b) if it makes the findings required pursuant to subdivision (c) for the proposed rules and regulations, except that the rules and regulations may not exempt either of the following:

(1) More than two single-family dwellings by the same applicant within a subdivision prior to June 30, 1991.

(2) Single-family dwellings in a subdivision where 25 percent or more of the parcels are undeveloped.

21675.2. Approval or Disapproval of Actions, Regulations, or Permits

(a) If a commission fails to act to approve or disapprove any actions, regulations, or permits within 60 days of receiving the request pursuant to Section 21675.1, the applicant or his or her representative may file an action pursuant to Section 1094.5 of the Code of Civil Procedure to compel the commission to act, and the court shall give the proceedings preference over all other actions or proceedings, except previously filed pending matters of the same character.

(b) The action, regulation, or permit shall be deemed approved only if the public notice required by this subdivision has occurred. If the applicant has provided seven days advance notice to the commission of the intent to provide public notice pursuant to this subdivision, then, not earlier than the date of the expiration the time limit established by Section 21675.1, an applicant may provide the required public notice. If the applicant chooses to provide public notice, that notice shall include a description of the proposed action, regulation, or permit substantially similar to the descriptions which are commonly used in public notices by the commission, the name and address of the commission, and a statement that the action, regulation, or permit shall be deemed approved if the commission has not acted within 60 days. If the applicant has provided the public notice specified in this subdivision, the time limit for action by the commission shall be extended to 60 days after the public notice is provided. If the applicant provides notice pursuant to this section, the commission shall refund to the applicant any fees which were collected for providing notice and which were not used for that purpose.

(c) Failure of an applicant to submit complete or adequate information pursuant to Sections 65943 to 65946, inclusive, of the Government Code, may constitute grounds for disapproval of actions, regulations, or permits.

(d) Nothing in this section diminishes the commission's legal responsibility to provide, where applicable, public notice and hearing before acting on an action, regulation, or permit.

21676. Review of Local General Plans

(a) Each local agency whose general plan includes areas covered by an airport land use commission plan shall, by July 1, 1983, submit a copy of its plan or specific plans to the airport land use commission. The commission shall determine by August 31, 1983, whether the plan or plans are consistent or inconsistent with the commission's plan. If the plan or plans are inconsistent with the commission's plan, the local agency shall be notified and that local agency shall have another hearing to reconsider its plans. The local agency may overrule the commission after such a hearing by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article stated in Section 21670.

(b) Prior to the amendment of a general plan or specific plan, or the addition or approval of a zoning ordinance or building regulation within the planning boundary established by the airport land use commission pursuant to Section 21675, the local agency shall first refer the proposed action to the commission. If the commission determines that the proposed action is inconsistent with the commission's plan, the referring agency shall be notified. The local agency may, after a public hearing, overrule the commission by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article stated in Section 21670.

(c) Each public agency owning any airport within the boundaries of an airport land use commission plan shall, prior to modification of its airport master plan, refer such proposed change to the airport land use commission. If the commission determines that the proposed action is inconsistent with the commission's plan, the referring agency shall be notified. The public agency may, after a public hearing, overrule the commission by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article stated in Section 21670.

(d) Each commission determination pursuant to subdivision (b) or (c) shall be made within 60 days from the date of referral of the proposed action. If a commission fails to make the determination within that period, the proposed action shall be deemed consistent with the commission's plan.

21676.5. Review of Local Plans

(a) If the commission finds that a local agency has not revised its general plan or specific plan or overruled the commission by a two-thirds vote of its governing body after making specific findings that the proposed action is consistent with the purposes of this article as stated in Section 21670, the commission may require the local agency submit all subsequent actions, regulations, and permits to the commission for review until its general plan or specific plan is revised or the specific findings are made. If, in the determination of the commission, an action, regulation, or permit of the local agency is inconsistent with the commission plan, the local agency shall be notified and that local agency shall hold a

hearing to reconsider its plan. The local agency may overrule the commission after hearing by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article as stated in Section 21670.

(b) Whenever the local agency has revised its general plan or specific plan or has overruled the commission pursuant to subdivision (a), the proposed action of the local agency shall not be subject to further commission review, unless the commission and the local agency agree that the individual projects shall be reviewed by the commission.

21677. Marin County Override Provisions

Notwithstanding Section 21676, any public agency in the County of Marin may overrule the Marin County Airport Land Use Commission by a majority vote of its governing body.

21678. Airport Owner's Immunity

With respect to a publicly owned airport that a public agency does not operate, if the public agency pursuant to Section 21676 or 21676.5 overrides a commission's action or recommendation, the operator of the airport shall be immune from liability for damages to property or personal injury caused by or resulting directly or indirectly from the public agency's decision to override the commission's action or recommendation.

21679. Court Review

(a) In any county in which there is no airport land use commission or other body designated to assume the responsibilities of an airport land use commission, or in which the commission or other designated body has not adopted an airport land use plan, an interested party may initiate proceedings in a court of competent jurisdiction to postpone the effective date of a zoning change, a zoning variance, the issuance of a permit, or the adoption of a regulation by a local agency, which directly affects the use of land within one mile of the boundary of a public airport within the county.

(b) The court may issue an injunction which postpones the effective date of the zoning change, zoning variance, permit, or regulation until the governing body of the local agency which took the action does one of the following:

(1) In the case of an action which is a legislative act, adopts a resolution declaring that the proposed action is consistent with the purposes of this article stated in Section 21670.

(2) In the case of an action which is not a legislative act, adopts a resolution making findings based on substantial evidence in the record that the proposed action is consistent with the purposes of this article stated in Section 21670.

(3) Rescinds the action.

(4) Amends its action to make it consistent with the purposes of this article stated in Section 21670, and complies with either paragraph (1) or (2) of this subdivision, whichever is applicable.

(c) The court shall not issue an injunction pursuant to subdivision (b) if the local agency which took the action demonstrates that the general plan and any applicable specific plan of the agency accomplishes the purposes of an airport land use plan as provided in Section 21675.

(d) An action brought pursuant to subdivision (a) shall be commenced within 30 days of the decision or within the appropriate time periods set by Section 21167 of the Public Resources Code, whichever is longer.

(e) If the governing body of the local agency adopts a resolution pursuant to subdivision (b) with respect to a publicly owned airport that the local agency does not operate, the operator of the airport shall be immune from liability for damages to property or personal injury from the local agency's decision to proceed with the zoning change, zoning variance, permit, or regulation.

(f) As used in this section, "interested party" means any owner of land within two miles of the boundary of the airport or any organization with a demonstrated interest in airport safety and efficiency.

21679.5. Deferral of Court Review

(a) Until June 30, 1991, no action pursuant to Section 21679 to postpone the effective date of a zoning change, a zoning variance, the issuance of a permit, or the adoption of a regulation by a local agency, directly affecting the use of land within one mile of the boundary or a public airport, shall be commenced in any county in which the commission or other designated body has not adopted an airport land use plan, but is making substantial progress toward the completion of the plan.

(b) If a commission has been prevented from adopting the comprehensive land use plan by June 30, 1991, or if the adopted plan could not become effective, because of a lawsuit involving the adoption of the plan, the June 30, 1991 date in subdivision (a) shall be extended by the period of time during which the lawsuit was pending in a court of competent jurisdiction.

(c) Any action pursuant to Section 21679 commenced prior to January 1, 1990, in a county in which the commission or other designated body has not adopted an airport land use plan, but is making substantial progress toward the completion of the plan, which has not proceeded to final judgment, shall be held in abeyance until June 30, 1991. If the commission

or other designated body does not adopt an airport land use plan on or before June 30, 1991, the plaintiff or plaintiffs may proceed with the action.

(d) An action to postpone the effective date of a zoning change, a zoning variance, the issuance of a permit, or the adoption of a regulation by a local agency, directly affecting the use of land within one mile of the boundary of a public airport for which an airport land use plan has not been adopted by June 30, 1991, shall be commenced within 30 days of June 30, 1991, or within 30 days of the decision by the local agency, or within the appropriate time periods set by Section 21167 of the Public Resources Code, whichever date is later.

Public Utilities Code
Chapter 4, Article 3

REGULATION OF AIRPORTS

21661.5 Approval of Construction Plans; Submission of Plan to Airport Land Use Commission

No political subdivision, any of its officers or employees, or any person may submit any application for the construction of a new airport to any local, regional, state, or federal agency unless the plan for such construction is first approved by the board of supervisors of the county, or the city council of the city, in which the airport is to be located and unless the plan is submitted to the appropriate commission exercising powers pursuant to Article 3.5 (commencing with Section 21670) of Chapter 4 of Division 9, and acted upon by such commission in accordance with the provisions of such article.

21664.5 Approval of Sites; Amended Airport Permits; Airport Expansion Defined

An amended airport permit shall be required for every expansion of an existing airport. An applicant for an amended airport permit shall comply with each requirement of this article pertaining to permits for new airports. The department may by regulation provide for exemptions from the operation of the section pursuant to Section 21661, except that no exemption shall be made limiting the applicability of subdivision (e) of Section 21666, pertaining to environmental considerations, including the requirement for public hearings in connection therewith.

As used in this section, "airport expansion" includes any of the following:

(a) The acquisition of clear zones or of any interest in land for the purpose of any other expansion as set forth in this section.

(b) The construction of a new runway.

(c) The extension or realignment of an existing runway.

(d) Any other expansion of the airport's physical facilities for the purpose of accomplishing or which are related to the purpose of subdivision (a), (b), or (c).

This section shall not apply to any expansion of an existing airport if the expansion commenced on or prior to the effective date of this section and the expansion met the approval on or prior to such effective date of each governmental agency which by law required such approval.

Government Code
Chapter 3, Article 5

LOCAL PLANNING

65302.3. General and applicable specific plans; consistency with airport land use plans; amendment; nonconcurrence findings

(a) The general plan, and any applicable specific plan prepared pursuant to Article 8 (commencing with Section 65450), shall be consistent with the plan adopted or amended pursuant to Section 21675 of the Public Utilities Code.

(b) The general plan, and any applicable specific plan, shall be amended, as necessary, within 180 days of any amendment to the plan required under Section 21675 of the Public Utilities Code.

(c) If the legislative body does not concur with any of the provisions of the plan required under Section 21675 of the Public Utilities Code, it may satisfy the provisions of this section by adopting findings pursuant to Section 21676 of the Public Utilities Code.

Government Code
Chapter 4.5, Article 3

APPLICATIONS FOR DEVELOPMENT PROJECTS

Note: The following government code sections are referenced in Section 21675.2(c) of the ALUC statutes.

65943. Completeness of application; determination; submission of additional materials, appeal

(a) Not later than 30 calendar days after any public agency has received an application for a development project, the agency shall determine in writing whether the application is complete and shall immediately transmit the determination to the applicant for the development project. If the written determination is not made within 30 days after receipt of the application, and the application includes a statement that it is an application for a development permit, the application shall be deemed complete for purposes of this chapter. Upon receipt of any resubmittal of the application, a new 30-day period shall begin, during which the public agency shall determine the completeness of the application. If the application is determined not to be complete, the agency's determination shall specify those parts of the application which are incomplete and shall indicate the manner in which they can be made complete, including a list and thorough description of the specific information needed to complete the application. The applicant shall submit materials to the public agency in response to the list and description.

(b) Not later than 30 calendar days after receipt of the submitted materials, the public agency shall determine in writing whether they are complete and shall immediately transmit that determination to the applicant. If the written determination is not made within that 30-day period, the application together with the submitted materials shall be deemed complete for purposes of this chapter.

(c) If the application together with the submitted materials are determined not to be complete pursuant to subdivision (b), the public agency shall provide a process for the applicant to appeal that decision in writing to the governing body of the agency or, if there is no governing body, or the director of the agency, as provided by that agency. A city or county shall provide that the right of appeal is to the governing body or, at their option, the planning commission, or both.

There shall be a final written determination by the agency on the appeal not later than 60 calendar days after receipt of the applicant's written appeal. The fact that an appeal is permitted to both the planning commission and to the governing body does not extend the 60-day period. Notwithstanding a decision pursuant to subdivision (b) that the application and submitted materials are not complete, if the final written determination on the appeal is not made within that 60-day period, the application with the submitted materials shall be deemed complete for the purposes of this chapter.

(d) Nothing in this section precludes an applicant and a public agency from mutually agreeing to an extension of any time limit provided by this section.

(e) A public agency may charge applicants a fee not to exceed the amount reasonably necessary to provide the service required by this section. If a fee is charged pursuant to this section, the fee shall be collected as part of the application fee charged for the development permit.

65944. Acceptance of application as complete; requests for additional information; restrictions; clarification, amplification, correction, etc; prior to notice of necessary information

(a) After a public agency accepts an application as complete, the agency shall not subsequently request of an applicant any new or additional information which was not specified in the list prepared pursuant to Section 65940. The agency may, in the course of processing the application, request the applicant to clarify, amplify, correct, or otherwise supplement the information required for the application.

(b) The provisions of subdivision (a) shall not be construed as requiring an applicant to submit with his or her initial application the entirety of the information which a public agency may require in order to take final action on the application. Prior to accepting an application, each public agency shall inform the applicant of any information included in the list prepared pursuant to Section 65940 which will subsequently be required from the applicant in order to complete final action on the application.

(c) This section shall not be construed as limiting the ability of a public agency to request and obtain information which may be needed in order to comply with the provisions of Division 13 (commencing with Section 21000) of the Public Resources Code.

65945. Notice of proposal to adopt or amend certain plans or ordinances by city or county, fee; subscription to periodically updated notice as alternative, fee

(a) At the time of filing an application for a development permit with a city or county, the city or county shall inform the applicant that he or she may make a written request to retrieve notice from the city or county of a proposal to adopt or amend any of the following plans or ordinances:

(1) A general plan.
(2) A specific plan.
(3) A zoning ordinance.
(4) An ordinance affecting building permits or grading permits.

The applicant shall specify, in the written request, the types of proposed action for which notice is requested. Prior to taking any of those actions, the city or county shall give notice to any applicant who has requested notice of the type of action proposed and whose development project is pending before the city or county if the city or county determines that the proposal is reasonably related to the applicant's request for the development permit. Notice shall be given only for those types of actions which the applicant specifies in the request for notification.

The city or county may charge the applicant for a development permit, to whom notice is provided pursuant to this subdivision, a reasonable fee not to exceed the actual cost of

providing that notice. If a fee is charged pursuant to this subdivision, the fee shall be collected as part of the application fee charged for the development permit.

(b) As an alternative to the notification procedure prescribed by subdivision (a), a city or county may inform the applicant at the time of filing an application for a development permit that he or she may subscribe to a periodically updated notice or set of notices from the city or county which lists pending proposals to adopt or amend any of the plans or ordinances specified in subdivision (a), together with the status of the proposal and the date of any hearings thereon which have been set.

Only those proposals which are general, as opposed to parcel-specific in nature, and which the city or county determines are reasonably related to requests for development permits, need be listed in the notice. No proposals shall be required to be listed until such time as the first public hearing thereon has been set. The notice shall be updated and mailed at least once every six weeks; except that a notice need not be updated and mailed until a change in its contents is required.

The city or county may charge the applicant for a development permit, to whom notice is provided pursuant to this subdivision, a reasonable fee not to exceed the actual cost of providing that notice, including the costs of updating the notice, for the length of time the applicant requests to be sent the notice or notices.

65945.3. Notice of proposal to adopt or amend rules or regulations affecting issuance of permits by local agency other than city or county; fee

At the time of filing an application for a development permit with a local agency, other than a city or county, the local agency shall inform the applicant that he or she may make a written request to receive notice of any proposal to adopt or amend a rule or regulation affecting the issuance of development permits.

Prior to adopting or amending any such rule or regulation, the local agency shall give notice to any applicant who has requested such notice and whose development project is pending before the agency if the local agency determines that the proposal is reasonably related to the applicant's request for the development permit.

The local agency may charge the applicant for a development permit, to whom notice is provided pursuant to this section, a reasonable fee not to exceed the actual cost of providing that notice. If a fee is charged pursuant to this section, the fee shall be collected as part of the application fee charged for the development permit.

65945.5. Notice of proposal to adopt or amend regulation affecting issuance of permits and which implements statutory provision by state agency

At the time of filing an application for a development permit with a state agency, the state agency shall inform the applicant that he or she may make a written request to receive notice of any proposal to adopt or amend a regulation affecting the issuance of development permits and which implements a statutory provision.

Prior to adopting or amending any such regulation, the state agency shall give notice to any applicant who has requested such notice and whose development project is pending before the state agency if the state agency determines that the proposal is reasonably related to the applicant's request for the development permit.

65945.7. Actions, inactions, or recommendations regarding ordinances, rules or regulations; invalidity or setting aside ground of error only if prejudicial

No action, inaction, or recommendation regarding any ordinance, rule, or regulation subject to this Section 65945, 65945.3, or 65945.5 by any legislative body, administrative body, or the officials of any state or local agency shall be held void or invalid or be set aside by any court on the ground of any error, irregularity, informality, neglect, or omission (hereinafter called "error") as to any matter pertaining to notices, records, determinations, publications, or any matters of procedure whatever, unless after an examination of the entire case, including evidence, the court shall be of the opinion that the error complained of was prejudicial, and that by reason of such error that party complaining or appealing sustained and suffered substantial injury, and that a different result would have been probable if such error had not occurred or existed. There shall be no presumption that error is prejudicial or that injury was done if error is shown.

65946. Consolidated project information form; submission; application forms; fees

(a) The Office of Planning and Research, in consultation with the Resources Agency, and the Environmental Protection Agency, shall develop a consolidated project information form which may be used by applicants for development projects. This form shall provide for sufficient information to allow state agencies to determine whether or not the project will be subject to the requirements for a permit from the agency.

(b) Applicants for development projects may submit the form provided by subdivision (a) to the Office of Planning and Research for distribution to state agencies which have permit responsibilities for development projects. The Office of Planning and Research shall send copies of the form to such agencies within three days of receipt.

(c) Within 30 days of receipt of the form, each agency shall notify the Office of Planning and Research in writing whether or not a permit from that agency may be required and it shall send the Office of Planning and Research the appropriate permit application forms.

(d) Within 15 days of receipt of the completed form from such agencies, the Office of Planning and Research shall notify the applicant for a development project in writing of any permits required for the project specified, and it shall send the applicant the appropriate permit application forms received from the state agencies.

(e) The Office of Planning and Research, in consultation with the Resources Agency, and the Environmental Protection Agency, shall develop a consolidated project application form which may be used by applicants for development projects. The application form shall contain sufficient information to allow state agencies, departments, commissions, boards, and other administrative divisions within the agencies, to act on a permit for the project.

(f) Each state agency may develop an agency consolidated project application form which may be used by applicants for development projects. The application form shall contain sufficient information to allow the agency and any department, commission, board, and other administrative division within that agency to act on a permit.

(g) The Office of Planning and Research may charge an applicant for a development project a fee not to exceed the estimated reasonable cost of providing the services performed pursuant to this section. Before levying or changing a fee, the Office of Planning and Research shall adopt or amend regulations pursuant to the Administrative Procedures Act, Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2. The Office of Planning and Research shall make available to the public upon request data indicating the amount of cost, or estimated cost, required to provide the service and the revenue sources anticipated to provide the service, including general or special fund revenues.

Excerpts from Federal Aviation Regulations, Part 77

Part 77—Objects Affecting Navigable Airspace

Subpart A—General

§ 77.1 Scope.

This Part—

(a) Establishes standards for determining obstructions in navigable airspace;

(b) Sets forth the requirements for notice to the Administrator of certain proposed construction or alteration;

(c) Provides for aeronautical studies of obstructions to air navigation, to determine their effect on the safe and efficient use of airspace;

(d) Provides for public hearings on the hazardous effect of proposed construction or alteration on air navigation; and

(e) Provides for establishing antenna farm areas.

§ 77.2 Definition of terms.

For the purpose of this Part:

"Airport available for public use" means an airport that is open to the general public with or without a prior request to use the airport.

"A seaplane base" is considered to be an airport only if its sea lanes are outlined by visual markers.

"Nonprecision instrument runway" means a runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight-in nonprecision instrument approach procedure has been approved, or planned, and for which no precision approach facilities are planned, or indicated on an FAA planning document or military service military airport planning document.

"Precision instrument runway" means a runway having an existing instrument approach procedure utilizing an Instrument Landing System (ILS), or a Precision Approach Radar (PAR). It also means a runway for which a precision approach system is planned and is so indicated by an FAA approved airport layout plan; a military service approved military airport layout plan; any other FAA planning document, or military service military airport planning document.

"Utility runway" means a runway that is constructed for and intended to be used by propeller driven aircraft of 12,500 pounds maximum gross weight and less.

"Visual runway" means a runway intended solely for the operation of aircraft using visual approach procedures, with no straight-in instrument approach procedure and no instrument designation indicated on an FAA approved airport layout plan, a military service approved military airport layout plan, or by any planning document submitted to the FAA by competent authority.

§ 77.3 Standards.

(a) The standards established in this Part for determining obstructions to air navigation are used by the Administrator in—

(1) Administering the Federal-aid Airport Program and the Surplus Airport Program;

(2) Transferring property of the United States under Section 16 of the Federal Airport Act;

(3) Developing technical standards and guidance in the design and construction of airports; and

(4) Imposing requirements for public notice of the construction or alteration of any structure where notice will promote air safety.

(b) The standards used by the Administrator in the establishment of flight procedures and aircraft operational limitations are not set forth in this Part but are contained in other publications of the Administrator.

§ 77.5 Kinds of objects affected.

This Part applies to—

(a) Any object of natural growth, terrain, or permanent or temporary construction or alteration, including equipment or materials used therein, and apparatus of a permanent or temporary character; and

(b) Alteration of any permanent or temporary existing structure by a change in its height (including appurtenances), or lateral dimensions, including equipment or materials used therein.

Subpart B—Notice of Construction or Alteration

§ 77.11 Scope.

(a) This subpart requires each person proposing any kind of construction or alteration described in § 77.13(a) of this chapter to give adequate notice to the Administrator. It specifies the locations and dimensions of the construction or alteration for which notice is required and prescribes the form and manner of the notice. It also requires supplemental notices 48 hours before the start and upon the completion of certain construction or alteration that was the subject of a notice under § 77.13(a).

(b) Notices received under this subpart provide a basis for—

(1) Evaluating the effect of the construction or alteration on operational procedures and proposed operational procedures;

(2) Determinations of the possible hazardous effect of the proposed construction or alteration on air navigation;

(3) Recommendations for identifying the construction or alteration in accordance with the current Federal Aviation Administration Advisory Circular AC 70/7460-1 entitled "Obstruction Marking and Lighting," which is available without charge from the Department of Transportation, Distribution Unit, TAD 484.3, Washington, D.C. 20590;

(4) Determining other appropriate measures to be applied for continued safety of air navigation; and

(5) Charting and other notification to airmen of the construction or alteration.

§ 77.13 Construction or alteration requiring notice.

(a) Except as provided in § 77.15, each sponsor who proposes any of the following construction or alteration shall notify the Administrator in the form and manner prescribed in § 77.17:

(1) Any construction or alteration of more than 200 feet in height above the ground level at its site.

(2) Any construction or alteration of greater height than an imaginary surface extending outward and upward at one of the following slopes:

(i) 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of each airport specified in subparagraph (5) of this paragraph with at least one runway more than 3,200 feet in actual length, excluding heliports.

(ii) 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway of each airport specified in subparagraph (5) of this paragraph with its longest runway no more than 3,200 feet in actual length, excluding heliports.

(iii) 25 to 1 for a horizontal distance of 5,000 feet from the nearest point of the nearest landing and takeoff area of each heliport specified in subparagraph (5) of this paragraph.

(3) Any highway, railroad, or other traverse way for mobile objects, of a height which, if adjusted upward 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance, 15 feet for any other public roadway, 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road, 23 feet for a railroad, and for a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally

traverse it, would exceed a standard of paragraph (1) or (2) of this section.

(4) When requested by the FAA, any construction or alteration that would be in an instrument approach area (defined in the FAA standards governing instrument approach procedures) and available information indicates it might exceed a standard of Subpart C of this part.

(5) Any construction or alteration on any of the following airports (including heliports):

(i) An airport that is available for public use and is listed in the Airport Directory of the current Airman's Information Manual or in either the Alaska or Pacific Airman's Guide and Chart Supplement.

(ii) An airport under construction, that is the subject of a notice or proposal on file with the Federal Aviation Administration, and, except for military airports, it is clearly indicated that the airport will be available for public use.

(iii) An airport that is operated by an armed force of the United States.

(b) Each sponsor who proposes construction or alteration that is the subject of a notice under paragraph (a) of this section and is advised by an FAA regional office that a supplemental notice is required shall submit that notice on a prescribed form to be received by the FAA regional office at least 48 hours before the start of the construction or alteration.

(c) Each sponsor who undertakes construction or alteration that is the subject of a notice under paragraph (a) of this section shall, within 5 days after that construction or alteration reaches its greatest height, submit a supplemental notice on a prescribed form to the FAA regional office having jurisdiction over the region involved, if—

(1) The construction or alteration is more than 200 feet above the surface level of its site; or

(2) An FAA regional office advises him that submission of the form is required.

§ 77.15 Construction or alteration not requiring notice.

No person is required to notify the Administrator for any of the following construction or alteration:

(a) Any object that would be shielded by existing structures of a permanent and substantial character or by natural terrain or topographic features of equal or greater height, and would be located in the congested area of a city, town, or settlement where it is evident beyond all reasonable doubt that the structure so shielded will not adversely affect safety in air navigation.

(b) Any antenna structure of 20 feet or less in height except one that would increase the height of another antenna structure.

(c) Any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device, of a type approved by the Administrator, or an appropriate military service on military airports, the location and height of which is fixed by its functional purpose.

(d) Any construction or alteration for which notice is required by any other FAA regulation.

§ 77.17 Form and time of notice.

(a) Each person who is required to notify the Administrator under § 77.13(a) shall send one executed form set (four copies) of FAA Form 7460–1, Notice of Proposed Construction or Alteration, to the [Manager] , Air Traffic Division, FAA Regional Office having jurisdiction over the area within which the construction or alteration will be located. Copies of FAA Form 7460–1 may be obtained from the headquarters of the Federal Aviation Administration and the regional offices.

(b) The notice required under § 77.13(a) (1) through (4) must be submitted at least 30 days before the earlier of the following dates—

(1) The date the proposed construction or alteration is to begin.

(2) The date an application for a construction permit is to be filed.

However, a notice relating to proposed construction or alteration that is subject to the licensing requirements of the Federal Communications Act may be sent to the FAA at the same time the application for construction is filed with the Federal Communications Commission, or at any time before that filing.

(c) A proposed structure or an alteration to an existing structure that exceeds 2,000 feet in height above the ground will be presumed to be a hazard to air navigation and to result in an inefficient utilization of airspace and the applicant has the burden of overcoming that presumption. Each notice submitted under the pertinent provisions of this Part 77 proposing a structure in excess of 2,000 feet above ground, or an alteration that will make an existing structure exceed that height, must contain a detailed showing, directed to meeting this burden. Only in exceptional cases, where the FAA concludes that a clear and compelling showing has been made that it would not result in an inefficient utilization of the airspace and would not result in a hazard to air navigation, will a determination of no hazard be issued.

(d) In the case of an emergency involving essential public services, public health, or public safety that requires immediate construction or alteration, the 30-day requirement in paragraph (b) of this section does not apply and the notice may be sent by telephone, telegraph, or other expeditious means, with an executed FAA Form 7460-1 submitted within five days thereafter. Outside normal business hours, emergency notices by telephone or telegraph may be submitted to the nearest FAA Flight Service Station.

(e) Each person who is required to notify the Administrator by paragraph (b) or (c) of § 77.13, or both, shall send an executed copy of FAA Form 117-1, Notice of Progress of Construction or Alteration, to the [Manager], Air Traffic Division, FAA Regional Office having jurisdiction over the area involved.

§ 77.19 Acknowledgment of notice.

(a) The FAA acknowledges in writing the receipt of each notice submitted under § 77.13 (a).

(b) If the construction or alteration proposed in a notice is one for which lighting or marking standards are prescribed in the FAA Advisory Circular AC 70/7460-1 entitled "Obstruction Marking and Lighting," the acknowledgment contains a statement to that effect and information on how the structure should be marked and lighted in accordance with the manual.

(c) The acknowledgment states that an aeronautical study of the proposed construction or alteration has resulted in a determination that the construction or alteration—

(1) Would not exceed any standard of Subpart C and would not be a hazard to air navigation;

(2) Would exceed a standard of Subpart C but would not be a hazard to air navigation; or

(3) Would exceed a standard of Subpart C and further aeronautical study is necessary to determine whether it would be hazard to air navigation, that the sponsor may request within 30 days that further study, and that, pending completion of any further study, it is presumed the construction or alteration would be a hazard to air navigation.

Subpart C—Obstruction Standards

§ 77.21 Scope.

(a) This subpart establishes standards for determining obstructions to air navigation. It applies to existing and proposed manmade objects, objects of natural growth, and terrain. The standards apply to the use of navigable airspace by aircraft and to existing air navigation facilities, such as an air navigation aid, airport, Federal airway, instrument approach or departure procedure, or approved off-airway route. Additionally, they apply to a planned facility or use, or a change in an existing facility or use, if a proposal therefor is on file with the Federal Aviation Administration or an appropriate military service on the date the notice required by § 77.13(a) is filed.

(b) At those airports having defined runways with specially prepared hard surfaces, the primary surface for each such runway extends 200 feet beyond each end of the runway. At those airports having defined strips or pathways that are used regularly for the taking off and landing of aircraft and have been designated by approriate authority as runways, but do not have specially prepared hard surfaces, each end of the primary surface for each such runway shall coincide with the corresponding end of the runway. At those airports, excluding seaplane bases, having a defined landing and takeoff area with no defined pathways for the landing and taking off of aircraft, a determination shall be made as to which portions of the landing and takeoff area are regularly used as landing and takeoff pathways. Those pathways so determined shall be considered runways and an appropriate primary surface as defined in § 77.25(c) will be considered as being longitudinally centered on each runway so determined, and each end of that primary surface shall coincide with the corresponding end of that runway.

(c) The standards in this subpart apply to the effect of construction or alteration proposals upon an airport if, at the time of filing of the notice required by § 77.13(a), that airport is—

(1) Available for public use and is listed in the Airport Directory of the current Airman's Information Manual or in either the Alaska or Pacific Airman's Guide and Chart Supplement; or,

(2) A planned or proposed airport or an airport under construction, that is the subject of a notice or proposal on file with the Federal Aviation Administration, and, except for military airports, it is clearly indicated that that airport will be available for public use; or,

(3) An airport that is operated by an armed force of the United States.

(d) [Deleted]

§ 77.23 Standards for determining obstructions.

(a) An existing object, including a mobile object, is, and a future object would be, an obstruction to air navigation if it is of greater height than any of the following heights or surfaces:

(1) A height of 500 feet above ground level at the site of the object.

(2) A height that is 200 feet above ground level or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile of distance from the airport up to a maximum of 500 feet.

(3) A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

(4) A height within an en route obstacle clearance area, including turn and termination areas, of a Federal airway or approved off-airway route, that would increase the minimum obstacle clearance altitude.

(5) The surface of a takeoff and landing area of an airport or any imaginary surface established under §§ 77.25, 77.28, or 77.29. However, no part of the takeoff or landing area itself will be considered an obstruction.

(b) Except for traverse ways on or near an airport with an operative ground traffic control service, furnished by an air traffic control tower or by the airport management and coordinated with the air traffic control service, the standards of paragraph (a) of this section apply to traverse ways used or to be used for the passage of mobile objects only after the heights of these traverse ways are increased by:

(1) Seventeen feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance.

(2) Fifteen feet for any other public roadway.

(3) Ten feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road.

(4) Twenty-three feet for a railroad.

(5) For a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it.

§ 77.25 Civil airport imaginary surfaces.

The following civil airport imaginary surfaces are established with relation to the airport and to each runway. The size of each such imaginary surface is based on the category of each runway according to the type of approach available or planned for that runway. The slope and dimensions of the approach surface applied to each end of a runway are determined by the most precise approach existing or planned for that runway end.

(a) Horizontal surface—a horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of specified radii from the center of each end of the primary surface of each runway of each airport and connecting the adjacent arcs by lines tangent to those arcs. The radius of each arc is:

(1) 5,000 feet for all runways designated as utility or visual;

(2) 10,000 feet for all other runways.

The radius of the arc specified for each end of a runway will have the same arithmetical value. That value will be the highest determined for either end of the runway. When a 5,000-foot arc is encompassed by tangents connecting two adjacent 10,000-foot arcs, the 5,000-foot arc shall be disregarded on the construction of the perimeter of the horizontal surface.

(b) Conical surface—a surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to 1 for a horizontal distance of 4,000 feet.

(c) Primary surface—a surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the primary surface extends 200 feet beyond each end of that runway; but when the runway has no specially prepared hard surface, or planned hard surface, the primary surface ends at each end of that runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline. The width of a primary surface is:

(1) 250 feet for utility runways having only visual approaches.

(2) 500 feet for utility runways having nonprecision instrument approaches.

(3) For other than utility runways the width is:

(i) 500 feet for visual runways having only visual approaches.

(ii) 500 feet for nonprecision instrument runways having visibility minimums greater than three-fourths statute mile.

(iii) 1,000 feet for a nonprecision instrument runway having a nonprecision instrument approach with visibility minimums as low as three-fourths of a statute mile, and for precision instrument runways.

The width of the primary surface of a runway will be that width prescribed in this section for the most precise approach existing or planned for either end of that runway.

(d) Approach surface—a surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface. An approach surface is applied to each end of each runway based upon the type of approach available or planned for that runway end.

(1) The inner edge of the approach surface is the same width as the primary surface and it expands uniformly to a width of:

(i) 1,250 feet for that end of a utility runway with only visual approaches;

(ii) 1,500 feet for that end of a runway other than a utility runway with only visual approaches;

(iii) 2,000 feet for that end of a utility runway with a nonprecision instrument approach;

(iv) 3,500 feet for that end of a nonprecision instrument runway other than utility, having visibility minimums greater than three-fourths of a statute mile;

(v) 4,000 feet for that end of a nonprecision instrument runway, other than utility, having a nonprecision instrument approach with visibility minimums as low as three-fourths statute mile; and

(vi) 16,000 feet for precision instrument runways.

(2) The approach surface extends for a horizontal distance of:

(i) 5,000 feet at a slope of 20 to 1 for all utility and visual runways;

(ii) 10,000 feet at a slope of 34 to 1 for all nonprecision instrument runways other than utility; and,

(iii) 10,000 feet at a slope of 50 to 1 with an additional 40,000 feet at a slope of 40 to 1 for all precision instrument runways.

(3) The outer width of an approach surface to an end of a runway will be that width prescribed in this subsection for the most precise approach existing or planned for that runway end.

(e) *Transitional surface*—These surfaces extend outward and upward at right angles to the runway centerline and the runway centerline extended at a slope of 7 to 1 from the sides of the primary surface and from the sides of the approach surfaces. Transitional surfaces for those portions of the precision approach surface which project through and beyond the limits of the conical surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach surface and at right angles to the runway centerline.

§ 77.27 [Revoked]

§ 77.28 Military airport imaginary surfaces.

(a) *Related to airport reference points.* These surfaces apply to all military airports. For the purposes of this section a military airport is any airport operated by an armed force of the United States.

(1) *Inner horizontal surface*—A plane is oval in shape at a height of 150 feet above the established airfield elevation. The plane is constructed by scribing an arc with a radius of 7,500 feet about the centerline at the end of each runway and interconnecting these arcs with tangents.

(2) *Conical surface*—A surface extending from the periphery of the inner horizontal surface outward and upward at a slope of 20 to 1 for a horizontal distance of 7,000 feet to a height of 500 feet above the established airfield elevation.

(3) *Outer horizontal surface*—A plane, located 500 feet above the established airfield elevation, extending outward from the outer periphery of the conical surface for a horizontal distance of 30,000 feet.

(b) *Related to runways.* These surfaces apply to all military airports.

(1) Primary surface—A surface located on the ground or water longitudinally centered on each runway with the same length as the runway. The width of the primary surface for runways is 2,000 feet. However, at established bases where substantial construction has taken place in accordance with a previous lateral clearance criteria, the 2,000-foot width may be reduced to the former criteria.

(2) *Clear zone surface*—A surface located on the ground or water at each end of the primary surface, with a length of 1,000 feet and the same width as the primary surface.

(3) *Approach clearance surface*—An inclined plane, symmetrical about the runway centerline extended, beginning 200 feet beyond each end of the primary surface at the centerline elevation of the runway end and extending for 50,000 feet. The slope of the approach clearance surface is 50 to 1 along the runway centerline extended until it reaches an elevation of 500 feet above the established airport elevation. It then continues horizontally at this elevation to a point 50,000 feet from the point of beginning. The width of this surface as the runway end is the same as the primary surface, it flares uniformly, and the width at 50,000 is 16,000 feet.

(4) *Transitional surfaces*—These surfaces connect the primary surfaces, the first 200 feet of the clear zone surfaces, and the ap-

proach clearance surfaces to the inner horizontal surface, conical surface, outer horizontal surface or other transitional surfaces. The slope of the transitional surface is 7 to 1 outward and upward at right angles to the runway centerline.

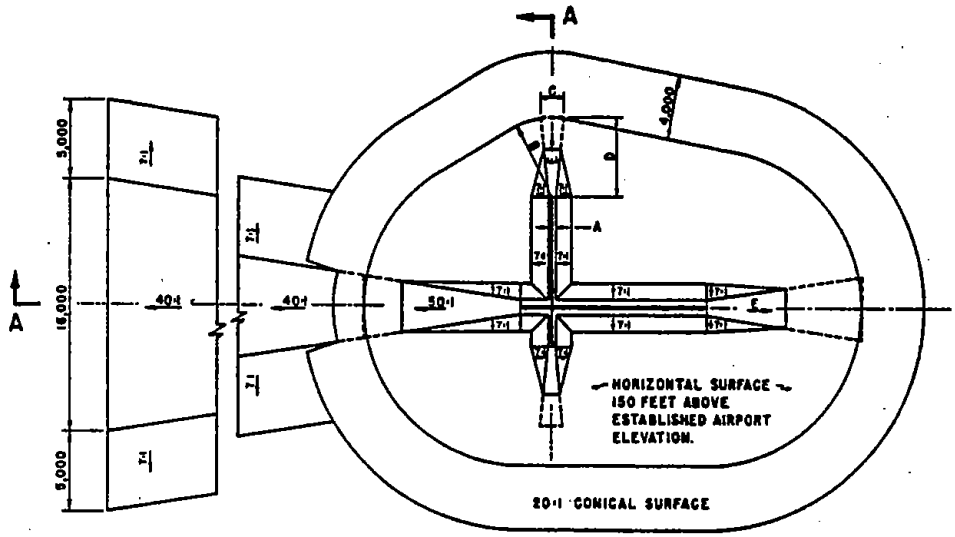
§ 77.29 Airport imaginary surfaces for heliports.

(a) *Heliport primary surface.* The area of the primary surface coincides in size and shape with the designated takeoff and landing area of a heliport. This surface is a horizontal plane at the elevation of the established heliport elevation.

(b) *Heliport approach surface.* The approach surface begins at each end of the heliport primary surface with the same width as the primary surface, and extends outward and upward for a horizontal distance of 4,000 feet where its width is 500 feet. The slope of the approach surface is 8 to 1 for civil heliports and 10 to 1 for military heliports.

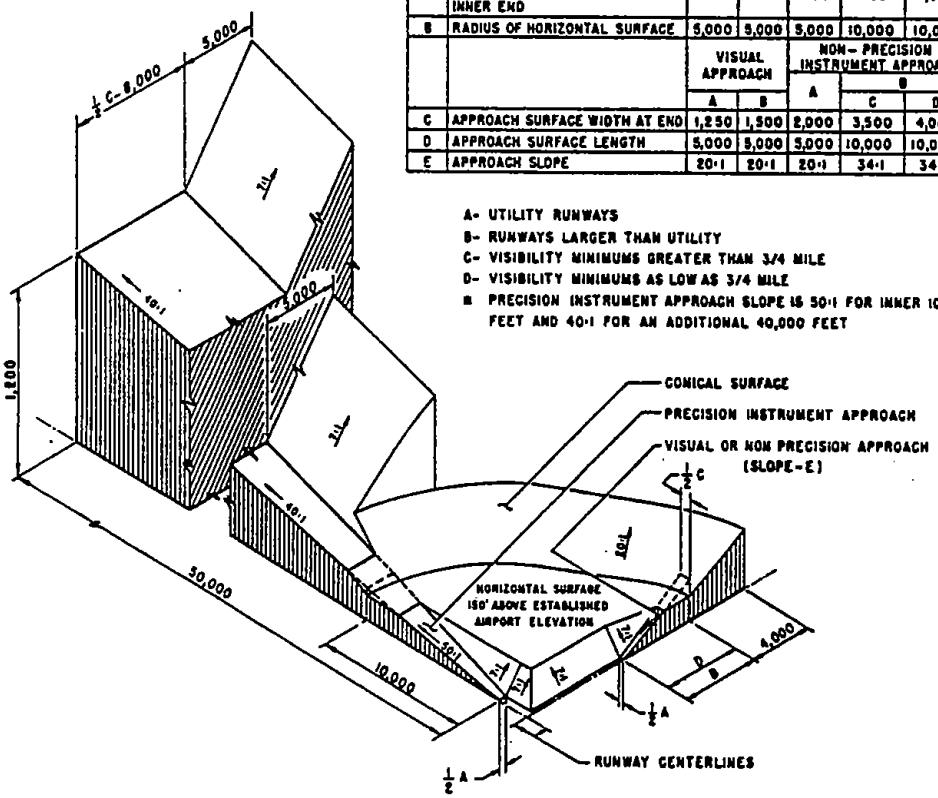
(c) *Heliport transitional surfaces.* These surfaces extend outward and upward from the lateral boundaries of the heliport primary surface and from the approach surfaces at a slope of 2 to 1 for a distance of 250 feet measured horizontally from the centerline of the primary and approach surfaces.

PART 77 OBJECTS AFFECTING NAVIGABLE AIRSPACE



DIM	ITEM	DIMENSIONAL STANDARDS (FEET)					
		VISUAL RUNWAY		NON-PRECISION INSTRUMENT RUNWAY			PRECISION INSTRUMENT RUNWAY
		A	B	A	B C	B D	
A	WIDTH OF PRIMARY SURFACE AND APPROACH SURFACE WIDTH AT INNER END	250	500	500	500	1,000	1,000
B	RADIUS OF HORIZONTAL SURFACE	5,000	5,000	5,000	10,000	10,000	10,000
		VISUAL APPROACH		NON-PRECISION INSTRUMENT APPROACH			PRECISION INSTRUMENT APPROACH
		A	B	A	B C	B D	
C	APPROACH SURFACE WIDTH AT END	1,250	1,500	2,000	3,500	4,000	16,000
D	APPROACH SURFACE LENGTH	5,000	5,000	5,000	10,000	10,000	*
E	APPROACH SLOPE	20:1	20:1	20:1	34:1	34:1	*

A- UTILITY RUNWAYS
B- RUNWAYS LARGER THAN UTILITY
C- VISIBILITY MINIMUMS GREATER THAN 3/4 MILE
D- VISIBILITY MINIMUMS AS LOW AS 3/4 MILE
* PRECISION INSTRUMENT APPROACH SLOPE IS 50:1 FOR INNER 10,000 FEET AND 40:1 FOR AN ADDITIONAL 40,000 FEET



ISOMETRIC VIEW OF SECTION A-A

§ 77.25 CIVIL AIRPORT IMAGINARY SURFACES

U.S. Department of Transportation
Federal Aviation Administration

NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION

Aeronautical Study Number

1. Nature of Proposal

A. Type	B. Class	C. Work Schedule Dates
☐ New Construction	☐ Permanent	Beginning _____
☐ Alteration	☐ Temporary (Duration _____ months)	End _____

2. Complete Description of Structure

A. Include effective radiated power and assigned frequency of all existing, proposed or modified AM, FM, or TV broadcast stations utilizing this structure.

B. Include size and configuration of power transmission lines and their supporting towers in the vicinity of FAA facilities and public airports.

C. Include information showing site orientation, dimensions, and construction materials of the proposed structure.

(if more space is required, continue on a separate sheet.)

3A. Name and address of individual, company, corporation, etc. proposing the construction or alteration. *(Number, Street, City, State and Zip Code)*

( ) _____
area code Telephone Number

B. Name, address and telephone number of proponent's representative if different than 3 above.

4. Location of Structure

A. Coordinates *(To nearest second)*	B. Nearest City or Town, and State	C. Name of nearest airport, heliport, flightpark, or seaplane base
° ' " Latitude	(1) Distance to 48 Miles	(1) Distance from structure to nearest point of nearest runway
° ' " Longitude	(2) Direction to 48	(2) Direction from structure to airport

5. Height and Elevation *(Complete to the nearest foot)*

A. Elevation of site above mean sea level	
B. Height of Structure including all appurtenances and lighting *(if any)* above ground, or water if so situated	
C. Overall height above mean sea level *(A + B)*	

D. Description of location of site with respect to highways, streets, airports, prominent terrain features, existing structures, etc. Attach a U.S. Geological Survey quadrangle map or equivalent showing the relationship of construction site to nearest airport(s). *(if more space is required, continue on a separate sheet of paper and attach to this notice.)*

Notice is required by Part 77 of the Federal Aviation Regulations (14 C.F.R. Part 77) pursuant to Section 1101 of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1101). Persons who knowingly and willingly violate the Notice requirements of Part 77 are subject to a fine (criminal penalty) of not more than $500 for the first offense and not more than $2,000 for subsequent offenses, pursuant to Section 902(a) of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1472(a)).

I HEREBY CERTIFY that all of the above statements made by me are true, complete, and correct to the best of my knowledge. In addition, I agree to obstruction mark and/or light the structure in accordance with established marking & lighting standards if necessary.

Date	Typed Name/Title of Person Filing Notice	Signature

FOR FAA USE ONLY

The Proposal:

- ☐ Does not require notice to FAA.
- ☐ Is not identified as an obstruction under any standard of FAR Part 77, Subpart C, and would not be a hazard to air navigation.
- ☐ Is identified as an obstruction under the standards of FAR Part 77, Subpart C, but would not be a hazard to air navigation.
- ☐ Should be obstruction ☐ marked ☐ lighted per FAA Advisory Circular 70/7460-1, Chapter (s) _____
- ☐ Obstruction marking and lighting are not necessary.

Remarks:

Issued in	Signature	Date

FAA Form 7460-1 8-85

DO NOT REMOVE CARBONS

Appendix C

Methods for Determining Concentrations of People

One criterion used in the *Airport Land Use Compatibility Plan* is the maximum number of people per acre that can be present in a given area at any one time. If a proposed use exceeds the maximum density, it will be considered inconsistent with ALUC policies. This appendix provides some guidance on how to make the people-per-acre determination.

The most difficult part of making a people-per-acre determination is estimating the number of people likely to use a particular facility. There are several methods that can be utilized, depending upon the nature of the proposed use:

- **Parking Ordinance** – The number of people present in a given area can be calculated based upon the number of parking spaces provided. Some assumption regarding the number of people per vehicle needs to be developed to calculate the number of people on-site. The number of people per acre can then be calculated by dividing the number of people on-site by the size of the parcel in acres. This approach is appropriate where the use is expected to be dependent upon access by vehicles.

- **Maximum Occupancy** – The Uniform Building Code can be used as a standard for determining the maximum occupancy of certain uses. The chart provided as Exhibit A is taken from the 1976 edition of the UBC (Table 33-A) and indicates the required number of square feet per occupant. The number of people on the site can be calculated by dividing the total floor area of a proposed use by the minimum square feet per occupant requirement listed in the table. The maximum occupancy can then be divided by the size of the parcel in acres to determine the people per acre.

  Surveys of actual occupancy levels conducted by the City of Sacramento have indicated that many retail and office uses are generally occupied at 50% of their maximum occupany levels, even at the busiest times of day. Therefore, the number of people calculated for office and retail uses should be adjusted (50%) to reflect the actual occupancy levels before making the final people-per-acre determination.

- **Survey of Similar Uses** – Certain uses may require an estimate based upon a survey of similar uses. This approach is more difficult, but is appropriate for uses which, because of the nature of the use, cannot be reasonably estimated based upon parking or square footage.

Exhibit C1
OCCUPANCY LEVELS
Uniform Building Code

Use	Minimum Square Feet per Occupant
1. Aircraft Hangars (no repair)	500
2. Auction Room	7
3 Assembly Areas, Concentrated Use (without fixed seats) Auditoriums Bowling Alleys (assembly areas) Churches and Chapels Dance Floors Lodge Rooms Reviewing Stands Stadiums	7
4. Assembly Areas, Less Concentrated Use Conference Rooms Dining Rooms Drinking Establishments Exhibit Rooms Gymnasiums Lounges Skating Rinks Stages	15
5. Children's Homes and Homes for the Aged	80
6. Classrooms	20
7. Dormitories	50
8. Dwellings	300
9. Garage, Parking	200
10. Hospitals and Sanitariums - Nursing Homes	80
11. Hotels and Apartments	200
12. Kitchen - Commercial	200
13. Library Reading Room	50
14. Locker Rooms	50
15. Mechanical Equipment Room	300
16. Nurseries for Children (Day Care)	50
17. Offices	100
18. School Shops and Vocational Rooms	50
19. Stores - Retail Sales Rooms	
Basement	20
Ground Floor	30
Upper Floors	50
20. Warehouses	300
21. All Others	100

Examples:

A. The proposal is for a 60,000-square-foot two-story office building on 4 net acres (exclusive of roads). The local parking ordinance requires one parking space for every 250 square feet of commercial space. Assuming that the use would generate one person per vehicle, the following calculations would derive the number of people per acre.

Steps:

1) 60,000 sq. ft. ÷ 250 people per vehicle/sq. ft. =240 (people expected at any one time).
2) 240 people ÷ 4 acres =60 people per acre.

Under this example, the use would be estimated to generate 60 people per acre. In zones with limits of 100 people-per-acre, the use would be considered compatible assuming all other conditions were met.

B. The proposal is for a 12,000-square-foot store on a 63,000-square-foot parcel. Using the maximum occupancy table from the Uniform Building Code (Exhibit A) and applying the assumption that the building is occupied at 50 percent of maximum nets results in the following calculations:

Steps:

1) 63,000 sq. ft. ÷ 43,560 sq. ft. (in an acre) =1.45 acre.
2) 12,000 sq. ft. ÷ 30 sq. ft./occupant =400 (max. building occupancy).
3) 400 max. bldg. occup. x 50% =200 (people expected at any one time).
4) 200 people ÷ 1.45 acre =138 people per acre.

Under this example, 138 people per acre would represent a reasonable estimate. In zones with limitations of 100 people-per-acre or less, the use would be considered incompatible.

C. The proposal is for a 3,000-square-foot office on a 16,500-square-foot parcel. Again using the table in Exhibit A but assuming the actual occupancy level is 50% of the maximum indicated by the UBC code provides the following result:

Steps:

1) 16,500 sq. ft. ÷ 43,560 sq. ft. (acre) =.38 acre.
2) 3,000 sq. ft. ÷ 100 sq. ft./occupant =30 (max. building occupancy).
3) 30 people maximum building occupancy x 50% (actual occupancy) =15 people in the building at any one time
3) 15 people ÷ .38 acres =39 people per acre.

Under this example, the use would be estimated to generate 39 people per acre. In zones with occupancy limits of 100, the use would be considered compatible assuming all other conditions were met.

Appendix **D**

Compatibility Guidelines for Specific Land Uses

The compatibility evaluations listed below for specific types of land uses can be used by local jurisdictions as guidelines in implementation of the general compatibility criteria listed in Table 2A. These evaluations are not regarded as adopted policies or criteria of the Imperial County Airport Land Use Commission. In case of any conflicts between these evaluations of specific land uses and the policies and criteria in Chapter 2 of this document, the contents of Chapter 2 shall prevail.

Land Use	Compatibility Zones			
	A	B1/B2	C	D
Agricultural Uses				
Truck and Specialty Crops	0	+	+	+
Field Crops	0	+	+	+
Pasture and Rangeland	0	+	+	+
Orchard and Vineyards	–	+	+	+
Dry Farm and Grain	0	+	+	+
Tree Farms, Landscape Nurseries and Greenhouses	–	0	+	+
Fish Farms	–	0	+	+
Feed Lots and Stockyards	–	0	+	+
Poultry Farms	–	0	+	+
Dairy Farms	–	0	+	+
Natural Uses				
Fish and Game Preserves	0	0	0	0
Land Preserves and Open Space	0	+	+	+
Flood and Geological Hazard Areas	0	+	+	+
Waterways: Rivers, Creeks, Canals, Wetlands, Bays, Lakes	0	0	0	+

– Incompatible
0 Potentially compatible with restrictions
\+ Compatible

Land Use	Compatibility Zones			
	A	B1/B2	C	D
Residential and Institutional				
Rural Residential - 10 acres or more	–	0	+	+
Low Density Residential - 2 to 10 acre lots	–	0/+	+	+
Single Family Residential - lots under 2 acres	–	–	0	+
Multi Family Residential	–	–	0	+
Mobile Home Parks	–	–	0	+
Schools, Colleges and Universities	–	–	–	+
Day Care Centers	–	–	0	+
Hospitals and Residential Care Facilities	–	–	–	+
Recreational				
Golf Course	0	+	+	+
Parks – low intensity; no group activities	0	+	+	+
Playgrounds and Picnic Areas	–	0	+	+
Athletic Fields	–	0	+	+
Riding Stables	–	0	+	+
Marinas and Water Recreation	–	0	+	+
Health Clubs and Spas	–	–	0	+
Tennis Courts	–	0	+	+
Swimming Pools	–	0	0	+
Fairgrounds and Race Tracks	–	–	–	+
Resorts and Group Camps	–	–	0	+
Industrial				
Research and Development Laboratories	–	0	+	+
Warehouses and Distribution Facilities	–	0	+	+
Manufacturing and Assembly	–	0	0	+
Cooperage and Bottling Plants	–	0	+	+
Printing, Publishing and Allied Services	–	0	+	+
Chemical, Rubber and Plastic Products	–	–	0	+
Food Processing	–	–	+	0

– Incompatible
0 Potentially compatible with restrictions
\+ Compatible

Land Use	Compatibility Zones			
	A	B1/B2	C	D
Commercial Uses				
Large Shopping Malls (500,000+ sq.ft.)	–	–	0	+
Retail Stores (one story)	–	0	0	+
Retail Stores (two story)	–	–	0	+
Restaurants and Drinking Establishments (no take out)	–	0	0	+
Food Take-Outs	–	–	0	+
Auto and Marine Services	–	0	+	+
Building Materials, Hardware and Heavy Equipment	–	0	+	+
Office Buildings (one story)	–	0	+	+
Multiple-story Retail, Office, and Financial	–	–	0	+
Banks and Financial Institutions	–	0	+	+
Repair Services	–	0	+	+
Gas Stations	–	0	+	+
Government Services/Public Buildings	–	0	+	+
Motels (one story)	–	0	0	+
Hotels and Motels (two story)	–	–	0	+
Theaters, Auditoriums, and Assembly Halls	–	–	0	+
Outdoor Theaters	–	–	0	+
Memorial Parks/Cemeteries	–	+	+	+
Truck Terminals	–	+	+	+
Transportation, Communications, and Utilities				
Automobile Parking	0	+	+	+
Highway & Street Right-of-ways	0	+	+	+
Railroad and Public Transit Facilities	0	+	+	+
Taxi, Bus & Train Terminals	–	0	+	+
Reservoirs	–	0	0	+
Power Lines	–	0	0	+
Water Treatment Facilities	–	0	+	+
Sewage Treatment and Disposal Facilities	–	0	0	+
Electrical Substations	–	0	0	+
Power Plants	–	–	0	+
Sanitary Landfills	–	–	–	0

– Incompatible
0 Potentially compatible with restrictions
+ Compatible

Appendix **E**

Sample Easement and Deed Notice Documents

The Imperial County *Airport Land Use Compatibility Plan* requires the dedication of avigation or overflight easements or use of deed notices in selected areas around each of the airports in the county. The specific applications are as noted in the Compatibility Criteria matrix, Table 2A.

Examples of three types of documents are presented on the following pages.

Exhibit E1 — Avigation Easement

Exhibit E2 — Overflight Easement

Exhibit E3 — Deed Notice

Exhibit E1

Typical Avigation Easement

This indenture made this ____ day of _____, 19 __, between _____ __ hereinafter referred to as Grantor, and the [Insert County or City name], a political subdivision in the State of California, hereinafter referred to as Grantee.

The Grantor, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, does hereby grant to the Grantee, its successors and assigns, a perpetual and assignable easement over the following described parcel of land in which the Grantor holds a fee simple estate. The property which is subject to this easement is depicted as _____ _____ on "Exhibit A" attached and is more particularly described as follows:

[Insert legal description of real property]

The easement applies to the Airspace above an imaginary plane over the real property. The plane is described as follows:

> The imaginary plane above the hereinbefore described real property, as such plane is defined by Part 77 of the Federal Aviation Regulations, and consists of a plane [describe approach, transition, or horizontal surface]; the elevation of said plane being based upon the _____Airport official runway end elevation of _____ feet Above Mean Sea Level (AMSL), as determined by [Insert name and Date of Survey or Airport Layout Plan that determines the elevation] the approximate dimensions of which said plane are described and shown on Exhibit A attached hereto and incorporated herein by reference.

The aforesaid easement and right-of-way includes, but is not limited to:

(1) For the use and benefit of the public, the easement and continuing right to fly, or cause or permit the flight by any and all persons, or any aircraft, of any and all kinds now or hereafter known, in, through, across, or about any portion of the Airspace hereinabove described; and

(2) The easement and right to cause or create, or permit or allow to be caused or created within all space above the existing surface of the hereinabove described real property and any and all Airspace laterally adjacent to said real property, such noise, vibration, currents and other effects of air, illumination and fuel consumption as may be inherent in, or may arise or occur from or during the operation of aircraft of any and all kinds, now or hereafter known or used, for navigation of or flight in air; and

(3) A continuing right to clear and keep clear from the Airspace any portions of buildings, structures, or improvements of any kinds, and of trees or other objects, including the right to remove or demolish those portions of such buildings, structures, improvements, trees, or other things which extend into or above said Airspace, and the right to cut to the ground level and remove, any trees which extend into or above the Airspace; and

(4) The right to mark and light, or cause or require to be marked or lighted, as obstructions to air navigation, any and all buildings, structures, or other improvements, and trees or other objects, which extend into or above the Airspace; and

(5) The right of ingress to, passage within, and egress from the hereinabove described real property, for the purposes described in subparagraphs (3) and (4) above at reasonable times and after reasonable notice.

For and behalf of itself, its successors and assigns, the Grantor hereby covenants with the [Insert County or City name], for the direct benefit of the real property constituting the _____ Airport hereinafter described, that neither the Grantor, nor its successors in interest or assigns will construct, install, erect, place or grow in or upon the hereinabove described real property, nor will they permit to allow, any building structure, improvement, tree or other object which extends into or above the Airspace, or which constitutes an obstruction to air navigation, or which obstructs or interferes with the use of the easement and rights-of-way herein granted.

The easements and rights-of-way herein granted shall be deemed both appurtenant to and for the direct benefit of that real property which constitutes the _____ Airport, in the [Insert County or City name], State of California; and shall further be deemed in gross, being conveyed to the Grantee for the benefit of the Grantee and any and all members of the general public who may use said easement or right-of-way, in landing at, taking off from or operating such aircraft in or about the _____ Airport, or in otherwise flying through said Airspace.

This grant of easement shall not operate to deprive the Grantor, its successors or assigns, of any rights which may from time to time have against any air carrier or private operator for negligent or unlawful operation of aircraft.

These covenants and agreements run with the land and are binding upon the heirs, administrators, executors, successors and assigns of the Grantor, and, for the purpose of this instrument, the real property firstly hereinabove described is the servient tenement and said _____ Airport is the dominant tenement.

DATED: _____ _____

_____

STATE OF } ss

COUNTY OF }

On _____, before me, the undersigned, a Notary Public in and for said County and State, personally appeared _____, and _____ known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same.

WITNESS my hand and official seal.

_____

Notary Public

Exhibit E2

Typical Overflight Easement

GRANTOR hereby grants to the _____ in _____, its successors or assigns, as owners of the [Name of Airport], California, an overflight easement for the following purposes and granting the following rights:

(1) For the use and benefit of the public, and to the extent and in the manner consistent with safe operating procedures as provided under applicable governmental regulations, the right to make flights, and the noise inherent thereto, in airspace over the property described in Exhibit A (attached) in connection with landings, takeoffs, and general operation of the [Name of Airport].

(2) The right to regulate or prohibit the release into the air of any substance which would impair the visibility or otherwise interfere with the operations of aircraft such as, but not limited to, steam, dust, and smoke.

(3) The right to regulate or prohibit light emissions, either direct or indirect (reflective), which might interfere with pilot vision.

(4) The right to prohibit electrical emissions which would interfere with aircraft communication systems or aircraft navigational equipment.

This easement shall be effective from this date and run with the land until such time as the [Name of Airport] is no longer used as an airport.

The real property subject to this overflight easement is described as follows:

See Attachment "A"

DATED: _____ GRANTOR: _____

_____

By: _____

Exhibit E3

Sample Deed Notice

The following statement should be included on the deed for the subject property and recorded in by the County. This statement should also be included on any parcel map, tentative map or final map for subdivision approval.

> This property is in the area subject to overflights by aircraft using _____ airport, and as a result, residents may experience inconvenience, annoyance or discomfort arising from the noise of such operations. State law (public utilities code section 21670 et. Seq.) establishes the importance of public use airports to protection of the public interest of the people of the State of California. Residents of property near a public use airport should therefore be prepared to accept such inconvenience, annoyance or discomfort from normal aircraft operations. Any subsequent deed conveying parcels or lots shall contain a statement in substantially this form.

Appendix F
Glossary

ABOVE GROUND LEVEL (AGL): An elevation datum given in feet above ground level.

AIR CARRIER: A person who undertakes directly by lease, or other arrangement, to engage in air transportation. (FAR 1) (Also see Certificated Route Air Carrier)

AIR CARRIERS: The commercial system of air transportation, consisting of the certificated route air carriers, air taxis (including commuters), supplemental air carriers, commercial operators of large aircraft, and air travel clubs. (FAA Census)

AIR ROUTE TRAFFIC CONTROL CENTER (ARTCC): A facility established to provide air traffic control service to aircraft operating on IFR flight plans within controlled airspace, principally during the en route phase of flight. (AIM)

AIR TAXI: A classification of air carriers which directly engage in the air transportation of persons, property, mail, or in any combination of such transportation and which do not directly or indirectly utilize large aircraft (over 30 seats or a maximum payload capacity of more than 7,500 pounds) and do not hold a Certificate of Public Convenience and Necessity or economic authority issued by the Department of Transportation. (Also see commuter air carrier and demand air taxi.) (FAA Census)

AIR TRAFFIC CONTROL (ATC): A service operated by appropriate authority to promote the safe, orderly, and expeditious flow of air traffic. (FAR 1)

AIRPORT TRAFFIC CONTROL TOWER (ATCT): A terminal facility that uses air/ground communications, visual signaling, and other devices to provide ATC services to aircraft operating in the vicinity of an airport or on the movement area. (AIM)

AIRCRAFT ACCIDENT: An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage. (NTSB)

AIRCRAFT OPERATION: The airborne movement of aircraft in controlled or non-controlled airport terminal areas and about given en route fixes or at other points where counts can be made. There are two types of operations - local and itinerant. (FAA Stats)

AIRCRAFT PARKING LINE LIMIT (APL): A line established by the airport authorities beyond which no part of a parked aircraft should protrude. (Airport Design)

AIRPORT: An area of land or water that is used or intended to be used for the landing and taking off of aircraft, and includes its buildings and facilities, if any. (FAR 1)

AIRPORT ELEVATION: The highest point of an airport's usable runways, measured in feet above mean sea level. (AIM)

AIRPORT HAZARD: Any structure or natural object located on or in the vicinity of a public airport, or any use of land near such airport, that obstructs the airspace required for the flight of aircraft in landing or taking off at the airport or is otherwise hazardous to aircraft landing, taking off, or taxiing at the airport. (Airport Design)

AIRPORT LAYOUT PLAN: A scale drawing of existing and proposed airport facilities, their location on the airport, and the pertinent clearance and dimensional information required to demonstrate conformance with applicable standards.

AIRPORT RADAR SERVICE AREA (ARSA): Regulatory airspace surrounding designated airports wherein FAA Air Traffic Control provides radar vectoring and sequencing on a full-time basis for all IFR and VFR aircraft. (AIM)

AIRPORT REFERENCE POINT: A point established on an airport, having equal relationship to all existing and proposed landing and takeoff areas, and used to geographically locate the airport and for other planning purposes. (Airport Design)

AIRWAY/FEDERAL AIRWAY: A control area or portion thereof established in the form of a corridor, the centerline of which is defined by radio navigational aids. (AIM)

ALERT AREA: A special use airspace which may contain a high volume of pilot training activities or an unusual type of aerial activity, neither of which is hazardous to aircraft. (AIM)

APPROACH LIGHT SYSTEM (ALS): An airport lighting system which provides visual guidance to landing aircraft by radiating light beams in a directional pattern by which the pilot aligns the aircraft with the extended runway centerline during a final approach to landing. Among the specific types of systems are:

- LDIN - Lead-in Light System.
- MALSR — Medium-intensity Approach Light System with Runway Alignment Indicator Lights.
- ODALS - Omnidirectional Approach Light System, a combination of LDIN and REILS.
- SSALR - Simplified Short Approach Light System with Runway Alignment Indicator Lights. (AIM)

APPROACH SPEED: The recommended speed contained in aircraft manuals used by pilots when making an approach to landing. This speed will vary for different segments of an approach as well as for aircraft weight and configuration. (AIM)

AUTOMATED WEATHER OBSERVING SYSTEM (AWOS): Airport electronic equipment which automatically measures meteorological parameters, reduces and analyzes the data via computer, and broadcasts weather information which can be received on aircraft radios in some applications, via telephone.

AUTOMATIC DIRECTION FINDER (ADF): An aircraft radio navigation system which senses and indicates the direction to a L/MF nondirectional radio beacon (NDB) ground transmitter. (AIM)

AUTOMATIC TERMINAL INFORMATION SERVICE (ATIS): The continuous broadcast of recorded non-control information in selected terminal areas. (AIM)

BACK COURSE APPROACH: A non-precision instrument approach utilizing the rearward projection of the ILS localizer beam.

BASED AIRCRAFT: Aircraft stationed at an airport on a long-term basis.

BUILDING RESTRICTION LINE (BRL): A line which identifies suitable building area locations on airports.

CEILING: Height above the earth's surface to the lowest layer of clouds or obscuring phenomena that is reported as "broken", "overcast", or "obscuration" and is not classified as "thin" or "partial". (AIM)

CERTIFICATED ROUTE AIR CARRIER: An air carrier holding a Certificate of Public Convenience and Necessity issued by the Department of Transportation authorizing the performance of scheduled service over specified routes, and a limited amount of nonscheduled service. (FAA Census)

CIRCLING APPROACH/CIRCLE-TO-LAND MANEUVER: A maneuver initiated by the pilot to align the aircraft with a runway for landing when a straight-in landing from an instrument approach is not possible or not desirable. (AIM)

COMMERCIAL OPERATOR: A person who, for compensation or hire, engages in the carriage by aircraft in air commerce of persons or property, other than as an air carrier. (FAR 1)

COMPASS LOCATOR: A low power, low or medium frequency radio beacon installed at the site of the outer or middle marker of an instrument landing system (ILS). (AIM)

COMPASS ROSE: A circle, graduated in degrees, printed on some charts or marked on the ground at an airport. It is used as a reference to either true or magnetic direction. (AIM)

COMMUNITY NOISE EQUIVALENT LEVEL (CNEL): The noise rating adopted by the State of California for measurement of airport noise. It represents the average daytime noise level during a 24-hour day, measured in decibels and adjusted to an equivalent level to account for the lower tolerance of people to noise during evening and nighttime periods.

COMMUTER AIR CARRIER: An air taxi operator which performs at least five round trips per week between two or more points and publishes flight schedules which specify the times, days of the week and places between which such flights are performed. (FAA Census)

CONTROLLED AIRSPACE: Any of several types of airspace within which some or all aircraft may be subject to air traffic control. (FAR 1)

CONTROL ZONE: Controlled airspace surrounding one or more airports, normally a circular area with a radius of 5 statute miles plus extensions to include instrument arrival and departure paths. Most control zones surround airports with air traffic control towers and are in effect only for the hours the tower is operational.

DEMAND AIR TAXI: Use of an aircraft operating under Federal Aviation Regulations, Part 135, passenger and cargo operations, including charter and excluding commuter air carrier. (FAA Census)

DISPLACED THRESHOLD: A threshold that is located at a point on the runway other than the designated beginning of the runway. (See Threshold) (AIM)

DISTANCE MEASURING EQUIPMENT (DME): Equipment (airborne and ground) used to measure, in nautical miles, the slant range distance of an aircraft from the DME navigational aid. (AIM)

FAR PART 77: The part of the Federal Aviation Regulations which deals with objects affecting navigable airspace.

FAR PART 77 SURFACES: Imaginary surfaces established with relation to each runway of an airport. There are five types of surfaces: (1) primary; (2) approach; (3) transitional; (4) horizontal; and (5) conical.

FEDERAL AVIATION ADMINISTRATION (FAA): The United States government agency which is responsible for insuring the safe and efficient use of the nation's airspace.

FIXED BASE OPERATOR (FBO): A business operating at an airport that provides aircraft services to the general public, including but not limited to sale of fuel and oil; aircraft sales, rental, maintenance, and repair; parking and tiedown or storage of aircraft; flight training; air taxi/charter operations; and specialty services, such as instrument and avionics maintenance, painting, overhaul, aerial application, aerial photography, aerial hoists, or pipeline patrol.

FLIGHT SERVICE STATION (FSS): FAA facilities which provide pilot briefings on weather, airports, altitudes, routes, and other flight planning information.

GENERAL AVIATION: That portion of civil aviation which encompasses all facets of aviation except air carriers. (FAA Stats)

GLIDE SLOPE: An electronic signal radiated by a component of an ILS to provide descent path guidance to approaching aircraft.

GLOBAL POSITIONING SYSTEM (GPS): A space-based radio positioning, navigation, and time-transfer systsem being developed by the U.S. Department of Defense. This newly-emerging technology may eventually become the principal system for air navigation throughout the world.

HELIPAD: A small, designated area, usually with a prepared surface, on a heliport, airport, landing/takeoff area, apron/ramp, or movement area used for takeoff, landing, or parking of helicopters. (AIM)

INSTRUMENT APPROACH PROCEDURE: A series of predetermined maneuvers for the orderly transfer of an aircraft under instrument flight conditions from the beginning of the initial approach to a landing or to a point from which a landing may be made visually. It is prescribed and approved for a specific airport by competent authority. (AIM)

INSTRUMENT FLIGHT RULES (IFR): Rules governing the procedures for conducting instrument flight. Also term used by pilots and controllers to indicate a type of flight plan. (AIM)

INSTRUMENT LANDING SYSTEM (ILS): A precision instrument approach system which normally consists of the following electronic components and visual aids: (1) Localizer; (2) Glide Slope; (3) Outer Marker; (4) Middle Marker; (5) Approach Lights. (AIM)

INSTRUMENT OPERATION: An aircraft operation in accordance with an IFR flight plan or an operation where IFR separation between aircraft is provided by a terminal control facility. (FAA ATA)

INSTRUMENT RUNWAY: A runway equipped with electronic and visual navigation aids for which a precision or non-precision approach procedure having straight-in landing minimums has been approved. (AIM)

ITINERANT OPERATION: An arrival or departure performed by an aircraft from or to a point beyond the local airport area.

LARGE AIRCRAFT: An aircraft of more than 12,500 pounds maximum certificated takeoff weight. (FAR 1)

LIMITED REMOTE COMMUNICATIONS OUTLET (LRCO): An unmanned, remote air/ground communications facility which may be associated with a VOR. It is capable only of receiving communications and relies on a VOR or a remote transmitter for full capability.

LOCALIZER (LOC): The component of an ILS which provides course guidance to the runway. (AIM)

LOCAL OPERATION: An arrival or departure performed by an aircraft: (1) operating in the traffic pattern, (2) known to be departing or arriving from flight in local practice areas, or (3) executing practice instrument approaches at the airport. (FAA ATA)

LORAN: An electronic ground-based navigational system established primarily for marine use but used extensively for VFR and limited IFR air navigation.

MARKER BEACON (MB): The component of an ILS which informs pilots, both aurally and visually, that they are at a significant point on the approach course.

MEAN SEA LEVEL (MSL): An elevation datum given in feet above mean sea level.

MEDIUM-INTENSITY APPROACH LIGHTING SYSTEM (MALS): The MALS is a configuration of steady-burning lights arranged symmetrically about and along the extended runway centerline. MALS may also be installed with sequenced flashers - in this case, the system is referred to as MALSF.

MICROWAVE LANDING SYSTEM (MLS): A precision instrument approach system providing a function similar to an ILS, but operating in the microwave spectrum. It normally consists of three components: azimuth station, elevation station, and precision distance measuring equipment.

MILITARY OPERATIONS AREA (MOA): A type of special use airspace of defined vertical and lateral dimensions established outside of Class A airspace to separate/segregate certain military activities from IFR traffic and to identify for VFR traffic where these activities are conducted. (AIM)

MINIMUM DESCENT ALTITUDE (MDA): The lowest altitude, expressed in feet above mean sea level, to which descent is authorized on final approach or during circle-to-land maneuvering in execution of a standard instrument approach procedure where no electronic glide slope is provided. (FAR 1)

MISSED APPROACH: A maneuver conducted by a pilot when an instrument approach cannot be completed to a landing. (AIM)

NAVIGATIONAL AID/NAVAID: Any visual or electronic device airborne or on the surface which provides point-to-point guidance information or position data to aircraft in flight. (AIM)

NONDIRECTIONAL BEACON (NDB): A 4 MF or UHF radio beacon transmitting nondirectional signals whereby the pilot of an aircraft equipped with direction finding equipment can determine his bearing to or from the radio beacon and "home" on or track to or from the station. (AIM)

NONPRECISION APPROACH PROCEDURE: A standard instrument approach procedure in which no electronic glide slope is provided. (FAR 1)

NONPRECISION INSTRUMENT RUNWAY: A runway with an instrument approach procedure utilizing air navigation facilities, with only horizontal guidance, or area-type navigation equipment for which a straight-in nonprecision instrument approach procedure has been approved or planned, and no precision approach facility or procedure is planned. (Airport Design)

OBSTACLE: An existing object, object of natural growth, or terrain, at a fixed geographical location, or which may be expected at a fixed location within a prescribed area, with reference to which vertical clearance is or must be provided during flight operation. (AIM)

OBSTACLE FREE ZONE (OFZ): A volume of space above and adjacent to a runway and its approach lighting system if one exists, free of all fixed objects except FAA-approved frangible aeronautical equipment and clear of vehicles and aircraft in the proximity of an airplane conducting an approach, missed approach, landing, takeoff, or departure.

OBSTRUCTION: An object/obstacle, including a mobile object, exceeding the obstruction standards specified in FAR Part 77, Subpart C. (AIM)

OUTER MARKER: A marker beacon at or near the glide slope intercept position of an ILS approach. (AIM)

PRECISION APPROACH PATH INDICATOR (PAPI): An airport landing aid similar to a VASI, but which has light units installed in a single row rather than two rows.

PRECISION APPROACH PROCEDURE: A standard instrument approach procedure in which an electronic glide slope is provided. (FAR 1)

PRECISION INSTRUMENT RUNWAY: A runway with an instrument approach procedure utilizing an instrument landing system (ILS), microwave landing system (MLS), or precision approach radar (PAR). (Airport Design)

RELOCATED THRESHOLD: The portion of pavement behind a relocated threshold that is not available for takeoff and landing. It may be available for taxiing and aircraft. (Airport Design)

REMOTE COMMUNICATIONS AIR/GROUND FACILITY (RCAG): An unmanned VHF/UHF transmitter/receiver facility which is used to expand ARTCC air/ground communications coverage and to facilitate direct contact between pilots and controllers. (AIM)

REMOTE COMMUNICATIONS OUTLET (RCO) AND REMOTE TRANSMITTER/RECEIVER (RTR): An unmanned communications facility remotely controlled by air traffic personnel. RCO's serve FSS's. RTR's serve terminal ATC facilities. (AIM)

RESTRICTED AREA: Designated airspace within which the flight of aircraft, while not wholly prohibited, is subject to restriction. (FAR 1)

RUNWAY CLEAR ZONE: A term previously used to describe the runway protection zone.

RUNWAY EDGE LIGHTS: Lights used to define the lateral limits of a runway. Specific types include:

- HIRL - High-Intensity Runway Lights.
- MIRL - Medium-Intensity Runway Lights.

RUNWAY END IDENTIFIER LIGHTS (REIL): Two synchronized flashing lights, one on each side of the runway threshold, which provide a pilot with a rapid and positive visual identification of the approach end of a particular runway. (AIM)

RUNWAY PROTECTION ZONE: A trapezoidal area at ground level, under the control of the airport authorities, for the purpose of protecting the safety of approaches and keeping the area clear of the congregation of people. The runway protection zone begins at the end of each primary surface and is centered upon the extended runway centerline. (Airport Design)

RUNWAY SAFETY AREA: A cleared, drained, graded, and preferably turfed area symmetrically located about the runway which, under normal conditions, is capable of supporting snow removal, fire fighting, and rescue equipment and of accommodating the occasional passage of aircraft without causing major damage to the aircraft.

SMALL AIRCRAFT: An aircraft of 12,500 pounds or less maximum certificated takeoff weight. (FAR 1)

SPECIAL USE AIRSPACE: Airspace of defined horizontal and vertical dimensions identified by an area on the surface of the earth wherein activities must be confined because of their nature and/or wherein limitations may be imposed upon aircraft operations that are not a part of those activities. (AIM)

STANDARD INSTRUMENT DEPARTURE (SID): A preplanned instrument flight rules (IFR) air traffic control departure procedure printed for pilot use in graphic and/or textual form. SID's provide transition from the terminal to the appropriate en route structure. (AIM)

STANDARD TERMINAL ARRIVAL ROUTE (STAR): A preplanned instrument flight rule (IFR) air traffic control arrival route published for pilot use in graphic and/or textual form. STARs provide transition from the en route structure to an outer fix or an instrument approach fix/arrival waypoint in the terminal area. (AIM)

STOPWAY: An area beyond the takeoff runway, no less wide than the runway and centered upon the extended centerline of the runway, able to support the airplane during an aborted takeoff, without causing structural damage to the airplane, and designated by the airport authorities for use in decelerating the airplane during an aborted takeoff. (FAR 1)

STRAIGHT-IN INSTRUMENT APPROACH – IFR: An instrument approach wherein final approach is begun without first having executed a procedure turn; it is not necessarily completed with a straight-in landing or made to straight-in landing weather minimums. (AIM)

TAXILANE: The portion of the aircraft parking area used for access between taxiways, aircraft parking positions, hangars, storage facilities, etc. (Airport Design)

TAXIWAY: A defined path, from one part of an airport to another, selected or prepared for the taxiing of aircraft. (Airport Design)

TERMINAL CONTROL AREA (TCA): Controlled airspace extending upward from the surface or higher to specified altitudes, within which all aircraft are subject to operating rules and pilot and equipment requirements specified in FAR Part 91. (AIM)

TERMINAL INSTRUMENT PROCEDURES (TERPS): Procedures for instrument approach and departure of aircraft to and from civil and military airports. There are four types of terminal instrument procedures: precision approach, nonprecision approach, circling, and departure.

TERMINAL RADAR SERVICE AREA (TRSA): Airspace surrounding designated airports wherein ATC provides radar vectoring, sequencing, and separation on a full-time basis for all IFR and participating VFR aircraft. (AIM)

THRESHOLD: The beginning of that portion of the runway usable for landing. (AIM) (Also see Displaced Threshold)

TOUCH-AND-GO: An operation by an aircraft that lands and departs on a runway without stopping or exiting the runway A touch-and-go is defined as two operations. (AIM)

TRAFFIC PATTERN: The traffic flow that is prescribed for aircraft landing at, taxiing on, or taking off from an airport. The components of a typical traffic pattern are upwind leg, crosswind leg, downwind leg, base leg, and final approach. (AIM)

TRANSIENT AIRCRAFT: Aircraft not based at the airport.

TRANSMISSOMETER: An apparatus used to determine visibility by measuring the transmission of light through the atmosphere. (AIM)

TRANSPORT AIRPORT: An airport designed, constructed, and maintained to serve airplanes having approach speeds of 121 knots or more. (Airport Design)

UNICOM (Aeronautical Advisory Station): A nongovernment air/ground radio communication facility which may provide airport information at certain airports. (AIM)

UTILITY AIRPORT: An airport designed, constructed, and maintained to serve airplanes having approach speeds less than 121 knots. (Airport Design)

VERY-HIGH-FREQUENCY OMNIDIRECTIONAL RANGE (VOR): The standard navigational aid used throughout the airway system to provide bearing information to aircraft. When combined with Tactical Air Navigation (TACAN) the facility, called VORTAC, provides distance as well as bearing information.

VISUAL APPROACH SLOPE INDICATOR (VASI): An airport landing aid which provides a pilot with visual descent (approach slope) guidance while on approach to landing. Also see PAPI.

VISUAL FLIGHT RULES (VFR): Rules that govern the procedures for conducting flight under visual conditions. The term "VFR" is also used by pilots and controllers to indicate type of flight plan. (AIM)

VISUAL GLIDE SLOPE INDICATOR (VGSI): A generic term for the group of airport visual landing aids which includes Visual Approach Slope Indicators (VASI), Precision Approach Path Indicators (PAPI), and Pulsed Light Approach Slope Indicators (PLASI). When FAA funding pays for this equipment, whichever type receives the lowest bid price will be installed unless the airport owner wishes to pay the difference for a more expensive unit.

VISUAL RUNWAY: A runway intended solely for the operation of aircraft using visual approach procedures, with no straight-in instrument approach procedure and no instrument designation indicated on an FAA-approved airport layout plan. (Airport Design)

WARNING AREA: Airspace which may contain hazards to nonparticipating aircraft in international airspace. (AIM)

SOURCES

FAR 1: Federal Aviation Regulations Part 1, Definitions and Abbreviations. (1993)

AIM: Airman's Information Manual, Pilot/Controller Glossary. (1993)

Airport Design: Federal Aviation Administration. *Airport Design.* Advisory Circular 150/5300-13. (1992)

FAA ATA: Federal Aviation Administration. *Air Traffic Activity.* (1986)

FAA Census: Federal Aviation Administration. *Census of U.S. Civil Aircraft.* (1986)

FAA Stats: Federal Aviation Administration. *Statistical Handbook of Aviation.* (1984)

NTSB: National Transportation Safety Board. *U.S. NTSB 830-3.* (1989)

STATE OF CALIFORNIA - BUSINESS, TRANSPORTATION AND HOUSING AGENCY PETE WILSON, Governor

DEPARTMENT OF TRANSPORTATION
DIVISION OF AERONAUTICS
1130 K STREET – 4th FLOOR
MAIL: P. O. BOX 942873
SACRAMENTO, CA 94273-0001
(916) 322-3090
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November 13, 1992

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Mr. Ken Brody
Hodges and Shutt
5010 Aviation Boulevard
Santa Rosa, CA 95403

Dear Mr. Brody:

This letter is in response to your request for a determination from the Division of Aeronautics on the use of the airport layout plans (ALPs) as the basis for preparing airport comprehensive land use plans (CLUPs) for the Lampson Field, Pearce Field, and proposed Quackenbush Mountain Airports as required by Public Utilities Code (PUC) 21675(a).

- **Lampson Field Airport** - According to your November 12, 1992 letter to the Division, we understand that both the airport master plan and the CLUP are in progress. Based upon our review of the current ALP, we would approve its use as a basis for the CLUP until the master plan is completed, with the understanding that the master plan will reflect a possible runway extension not currently indicated on the ALP.

- **Pearce Field Airport** - We have reviewed the ALP provided (Figure 4D of the Draft Lake County Airport Land Use Compatibility Plan) and have noted that the drawing does not accurately represent the existing facility. Our review shows that some existing buildings are missing and some existing stub taxiways are also missing. Our minimum requirement to approve the use of this ALP is to accurately reflect the existing facility. This can be accomplished by pencilling in the missing items on the diagram shown and resubmitting it for our review and approval.

- **Quackenbush Mountain Airport (proposed)** - The law does not require our review with an existing master plan.

Should you have any questions, please contact Christa Engle at (916) 322-9961.

Sincerely,

Fred Stewart

FRED STEWART, Chief
Office of Local Planning

cc: Mark Phillips

STATE OF CALIFORNIA - BUSINESS, TRANSPORTATION AND HOUSING AGENCY — PETE WILSON, Governor

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November 24, 1992

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Mr. Ken Brody
Senior Planner
Hodges and Shutt
5010 Aviation Boulevard
Santa Rosa, CA 95403

Dear Mr. Brody:

Thank you for your letter of clarification regarding the Lampson Airport and Pearce Field Airport layout plans. We also appreciate receiving the revised airport layout plan for Pearce Field. In accordance with Public Utilities Code Section 21675(a), we approve its use as the basis for the Pearce Field Airport Land Use Compatibility Plan.

If you have any questions, please contact Christa-Maria Engle at (916) 322-9961.

Sincerely,

Fred Stewart

FRED STEWART, Chief
Office of Local Planning